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# P.G DEREE QUESTION PAPERS FROM 2010 TO 2020

100-NR

M.D. DEGREE EXAMINATION - APRIL, 2010

# GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Conduction system of the heart.
- 2. Newer drugs used as neuroprotective therapy in Parkinsonism.
- 3. Biochemical defect in and mode of inheritance of congenital erythropoietic porphyria.
- 4. Pathogenesis of renal osteodystrophy.
- 5. Uninhibited bladder.
- 6. Immunotherapy of myasthenia gravis.
- 7. Genetics of haemolytic anaemias.
- 8. Autoantibodies in systemic lupus erythematosus
- 9. Laboratory diagnosis of cholera.
- 10. Exocrine pancreatic function tests.

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## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss briefly the development of vulva and anomalies.
- 2. Describe the histology of ovary.
- 3. Discuss pathogenesis of edema in pregnancy.
- 4. Discuss abnormalities of lactation.
- 5. Write short notes on:
  - a) Mefanamic acid
  - b) Sodium nitroprusside
- 6. What are the haemodynamic changes in pregnancy.
- 7. Discuss immunotherapy in Gynaecology.
- 8. Describe the flora of vagina and natural harriers of infection in female.
- 9. What is the role of pineal gland in Obstetrics and Gynaecology.
- 10. Write short notes on:
  - a) Bromocryptine
  - b) Fetal cortisol

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Clinical manifestations of cerebellar dysfunctions.
- 2. Patho physiology of diabetes keto acidosis.
- 3. Therapeutic pyramids of Juvenile Rheumatoid Arthritis.
- 4. Physiological functions of esophagus.
- 5. a) Classify anticonvulsants.
  - b) Mention three common drugs used in epilepsy, dose, side effects and uses.
- 6. Thyroid Function Test.
- 7. Vitamin D Metabolism.
- 8. Lab Diagnosis of parasitic infections.
- 9. Lab Diagnosis in Dengue Haemorrhagic fever.
- 10. Mechanism of Diarrhoea in children.

# M.D. DEGREE EXAMINATION – APRIL, 2010 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Classify the sympathetic receptors. Enumerate their site of distribution and functions. Give one test to check functioning of the sympathetic and parasympathetic nervous system.
- 2. Write about scavenging system in anaesthesia.
- 3. Write a note on John Snow.
- 4. Discuss the manufacture of nitrous oxide and purification of impurities of nitrous oxide.
- 5. Describe the fumigation of an operation theatre after the report of post operative tetanus.
- 6. Fate of sodium nitroprusside in the body and its toxicity.
- 7. Discuss the various types of vaporizers used in anaesthesia practice.
- 8. Write a note on Blood Urea Nitrogen and anaesthetic importance.
- 9. Write the anaesthetic implications of Magnesium.
- 10. Management of anaphylactic reaction on the operation table.

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the cell ultra structure and its role in health and disease.
- 2. Chemokines.
- 3. Endotoxic shock.
- 4. Mononuclear phagocytic system.
- 5. Fragile X syndrome.
- 6. Natural killer cells in health and disease.
- 7. Primary immune deficiency.
- 8. Apoptosis.
- 9. Pathological calcification.
- 10. Classification and characterization of Amyloidosis.

# M.D. DEGREE EXAMINATION – APRIL, 2010 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the Anatomy of peritoneal spaces and imaging features of pseudo pancreatic cyst.
- 2. Discuss the radiological features of mitral valvular disease.
- 3. Write short notes on:
  - a) Imaging in aortic dissection
  - b) Congenital heart diseases plain x-ray findings
  - c) Imaging features of eosinophilic granuloma
  - d) Spiculated masses of mammography
  - e) Imaging in renal hypertension.
- 4. Intensifying screens.
- 5. Role of scintigraphy in skeletal neoplasms.
- 6. Segmental anatomy of liver and its importance.
- 7. Short notes on Hirschsprung's disease.
- 8. Write short notes on:
  - a) Carpal tunnel syndrome
  - b) Heel effect
  - c) Bone densitometry
  - d) Mosaic perfusion in HRCT
  - e) Mesenteric ischemia
- 9. Factors affecting scatter radiation and methods for reducing the scatter radiation.
- 10. Congenital uterine abnormalities.

# M.D. DEGREE EXAMINATION – APRIL, 2010 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Development of lung and its anomalies.
- 2. Defense mechanism of respiratory system.
- 3. Spirometry
- 4. Measurement of Gas exchange.
- 5. Lung biopsy.
- 6. Bronchoscope as therapeutic tool.
- 7. Chemoreceptors controlling respiration.
- 8. Non tuberculous organism causing pneumonia in immunocompromised host.
- 9. Antifungal drugs used in lung diseases.
- 10. Role of steroids in the management of asthma.

#### M.D. DEGREE EXAMINATION – APRIL, 2010 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write the structure and functions of bacterial fimbriae.
- 2. Write an essay on bacterial lipopolysaccharide.
- 3. Give an account of bacterial taxonomy.
- 4. Discuss the antigen presenting cells and their role in immune response.
- 5. Write an essay on beta-lactamases of bacteria and methods of defection.
- 6. Write an essay on production and application of monoclonal antibodies.
- 7. Give an account of sterilization by moist heat.
- 8. Give an account of precipitation tests.
- 9. Write an essay on immunological surveillance.
- Classify autoimmunity. Describe the immunology of autoimmunity.

#### SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the role of family in health and disease.
- 2. Discuss the scope of social sciences in community medicine.
- 3. Community Based Rehabilitation in Leprosy.
- 4. Genetic Engineering.
- 5. Concept of Essential Drugs in Primary Health Care.
- 6. Child Labour.
- 7. Social Mobilisation.
- 8. Gender Mainstreaming in Medical Education.
- 9. Role of Voluntary Agencies in Health Care.
- 10. Green House Effect.

#### **PSYCHIATRY**

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Parietal lobe functions.
- 2. Validity.
- 3. Neuropeptides.
- 4. Rating scales for dyskinesia.
- 5. Instrumental conditioning
- 6. Mature Defenses.
- 7. Social Skills Training.
- 8. NMDA Receptors.
- 9. Second Messengers.
- 10.Genetic Counselling.

#### M.D. DEGREE EXAMINATION – APRIL, 2010 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Explain Replication, Transcription and Translation. Give their importance.
- Describe in detail Electron Transport Chain occurring in mitochondria.Explain its importance to the body.
- 3. Describe Beta oxidation of Fatty acids and its energetics.
- 4. What are the important Buffers present in the body? Explain Bicarbonate buffer system.
- 5. Describe Recombinant DNA technology.
- 6. Write a note on High Performance Liquid chromatography. Mention the biochemical importance of Gas Chromatography.
- 7. Describe Michaelis Mention equation and its relation between Enzyme Concentration, substrate concentration and pH.
- 8. Describe factors influencing enzyme reaction. Name five important serum enzyme and their clinical significance.
- 9. What re different levels of organization of proteins. Write in detail the bonds which are responsible for protein structure.
- 10. Write briefly the role of calmodulia in the regulation of intracellular calcium level.

#### **PHARMACOLOGY**

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Hypertensive animal model.
- 2. Therapeutic index.
- 3. Pharmacoempidemiology.
- 4. Plasma protein binding.
- 5. Enantiomers.
- 6. Principles of treatment of acute drug poisoning.
- 7. Drug prescribing during pregnancy.
- 8. Students 'T' Test.
- 9. Radioimmunoassay.
- 10. Acute toxicity studies.

#### FORENSIC MEDICINE

Paper-I : Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. How will you estimate age of an individual from teeth?
- 2. Describe the fractures of skull.
- 3. How will you proceed to examine a bundle of bones?
- 4. Discuss the pathophysiology of shock.
- 5. Describe the physiology of foetal blood circulation.
- 6. Describe the structure and medicolegal importance human hair.
- 7. How will you establish identification of victims of mass disaster?
- 8. Uses of mobile x-ray unit in Forensic Medicine.
- 9. Discuss the causes of death in criminal abortion.
- Discuss the causes and medicolegal aspect of death due to rupture of spleen.

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Myoneural junction.
- 2. Evoked potential.
- 3. Body fluids measurement.
- 4. Transcription.
- 5. Excitatory Neurotransmitters.
- 6. Osmosis.
- 7. Myasthenia Gravis.
- 8. Voltage Clamp.
- 9. Secondary active transport.
- 10. Cathode ray oscilloscope.

# M.D. DEGREE EXAMINATION – APRIL, 2010 RADIOTHERAPY

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the planning and installation of a Telecobalt unit.
- 2. Describe the lymphatic drainage of tongue. Mention the acute and late effects observed following radical radiation treatment to head and neck cancers.
- 3. Discuss the interaction of radiation with matter and its clinical significance.
- 4. Define radioprotectors and discuss their clinical uses.
- 5. Explain the technique and indications of total skin electron beam irradiation.
- 6. Discuss the methods employed to enhance the response of tumors to radiotherapy treatment.
- 7. Discuss the "WHO Ladder" of pain management in cancer.
- 8. Describe the radiation safety features in a Teletherapy unit installation.
- 9. Discuss the advantages of Linear Accelerator over Telecobalt in the treatment of cancer.
- 10.Discuss the lymphatic drainage of breast and latest TNM staging of breast cancer.

# M.S. DEGREE EXAMINATION – APRIL, 2010 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe briefly about Hypovolemic shock.
- 2. Acid base balance.
- 3. Classify Haemorrhage. Describe how do you manage reactionary haemorrhage in thyroid surgery.
- 4. Anatomy of Lymphnode and describe the lymphatic drainage of breast.
- 5. Frost bite.
- 6. Rodent ulcer.
- 7. Diabetic foot.
- 8. Liver function test.
- 9. Sensorcaine.
- 10.Pathology of Carcinoma of urinary bladder.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Torticoles.
- 2. Vitamin 'D'.
- 3. Synovium.
- 4. Local infiltration of hydrocortisone.
- 5. Carpal Tunnel Syndrome.
- 6. Anterior cruciate ligament tear and arthroscopic repair.
- 7. Hallux valgus.
- 8. Allografts.
- 9. Tennis Elbow.
- 10. Diagnostic measures for polyarthritis.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Anatomy and functions of retinal pigment epithelium.
- 2. Write about the Laws governing ocular motility.
- 3. Life cycle and Lab diagnosis of Acanthamoeba.
- 4. Optics and uses of slit lamp.
- 5. Pathogenesis of sugar cataract.
- 6. Fluorescein dye in ophthalmology.
- 7. Hypersensitivity in eye.
- 8. Dynamics of Tear film.
- 9. Prostamides.
- 10. a) Development of crystalline lens.
  - b) Knudson's Two hit theory of development of retinoblastoma.

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Physiology of deglutition.

- 2. Pterygopalatine fossa and its applied anatomy.
- 3. Describe the fascia and fascial spaces in the neck.
- 4. Describe briefly the anatomy of tracheobronchial tree with the help of suitable diagram.
- 5. Discuss topographic tests to find the site of lesion in facial nerve palsy.
- 6. Describe the development of maxillary antrum and the importance of its infection in children.
- 7. Discuss the hypotensive anaesthesia for ENT surgeries.
- 8. Mismatched blood transfusion and its clinical manifestations.
- 9. Immunohistochemistry and its applied importance.
- 10. Write short notes on:
  - a) High resolution C.T. Scan
  - b) Unipolar diathermy
  - c) Connel stiches in ENT

#### M.D. DEGREE EXAMINATION – APRIL, 2010 ANATOMY

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Bronchopulmonary segments and its clinical importance.
- 2. Inguinal canal and its surgical importance.
- 3. Appendix and its surgical importance.
- 4. Surgical spaces of the hand.
- 5. Surgical Anatomy of Prostate.
- 6. Surgical Anatomy of Gall bladder and its applied aspect.
- 7. Surgical Anatomy of the dependent pouches of the peritoneal cavity.
- 8. Lymphatic drainage of mammary gland and its applied aspect.
- 9. Anatomy of ureters and its surgical importance.
- 10. Surgical importance of the scalp.

#### D.V.L.

## Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Male urethra.
- 2. Ballooning degeneration.
- 3. Odland bodies.
- 4. Plasma cell.
- 5. Wood's lamp examination.
- 6. Phonolic glycolipid.
- 7. Sensory testing in leprosy
- 8. Prostatic fluid.
- 9. Regional variations in the skin.
- 10. Hair cycle.

#### **GENERAL MEDICINE**

# Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Genetically determined arrhythmia syndromes.
- 2. Management of acute respiratory distress syndrome.
- 3. Clinical features of sarcoidosis.
- 4. Scleroderma renal crisis.
- 5. Neuropsychiatric manifestations of endocrine disorders.
- 6. Hypouricaemic agents.
- 7. Alport's syndrome.
- 8. Psoriatic arthritis.
- 9. Management of inflammatory bowel diseases.
- 10. Imitinib mesylate.

# M.S. DEGREE EXAMINATION – APRIL, 2010 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What are the signs of foetal distress in pregnancy and labour?
- 2. Discuss etiopathogenesis of hydramnios.
- 3. Discuss direct causes of maternal mortality.
- 4. What is the role of ultrasound in labour.
- 5. Write short notes on:
  - a) Prophylactic forceps
  - b) Perinatal mortality in multiple gestation
- 6. Discuss various incisions in caesarian section.
- 7. Discuss acute inversion of uterus.
- 8. Write short notes on:
  - a) Macrosomia
  - b) Hyaline membrane disease
- 9. Discuss only etiology of early pregnancy loss.
- 10. Write short notes on:
  - a) Erythroblastosis foetalis
  - b) Hydrorrhoea gravidarum

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Approach to the diagnosis of neonatal jaundice in preterm infants.
- 2. Infant of diabetic mothers.
- 3. Emerging pattern of behaviour in a 18 months of child.
- 4. Mention few central issues in early adolescences.
- 5. Sleep requirement day time and night time sleep of a six month old infant.
- 6. Write short notes on:
  - a) Thumb sucking
  - b) Nocturnal seizures
- 7. Write in detail about Attention Deficit Hyper activity Disorder (ADHD)
- 8. Objects of beneficiaries of Integrated Child Development Science Programme(ICDS).
- 9. Immunization schedule in adolescence.
- 10.In a one year infant mention the Roentgenogram of centers of ossification.

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write a note on systemic inflammatory response syndrome (SIRS).
- 2. Discuss about on acute pain services (APS).
- 3. Discuss the recent advances in measurement of Depth of anaesthesia.
- 4. Describe the role of xenon in anaesthesia practice.
- 5. Describe the position of the patient and risk of Air Embolism.
- 6. Discuss about oxygen concentrators and their uses.
- 7. Write a note on Liquid Ventilation.
- 8. Describe the mechanism of immunosuppressive action of various drugs during transplant surgery.
- Describe clinical diagnosis of TURP syndrome in anaesthesia and its management.
- 10.Discuss the recent advances in Cardiac output and blood volume monitoring.

# M.D. DEGREE EXAMINATION – APRIL, 2010 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Endomyocardial fibrosis.
- 2. Diseases associated with alpha-1 antitrypsin deficiency.
- 3. Mechanisms of glomerular inury.
- 4. Urolithiasis.
- 5. Demyelinating diseases.
- 6. Primitive neuroectodermal tumour (PNET).
- 7. Paget's disease of bone.
- 8. Hepatocellular carcinoma fibrolamellar variant.
- 9. Role of macrophages and immunity in leprosy.
- 10.Merits and demerits of various classifications of nonhodgkin's lymphoma.

#### M.D. DEGREE EXAMINATION – APRIL, 2010 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Radiological evaluation of postoperative chest.
- 2. Imaging of Seronegative spondyloarthritis.
- 3. Discuss the role of the various imaging techniques in the evaluation of renal transplant.
- 4. Write short notes on:
  - a) Biliary atresia
  - b) Imaging of eclopic pregnancy
  - c) Papillary necrosis
  - d) Renal ectopia
  - e) Radioisotopes in thyroid diseases
- 5. Ventilation and perfusion scan in acute pulmonary embolism.
- 6. Features of intra and extra lobar sequestration of lung.
- 7. Syringomyelia.
- 8. Write short notes on:
  - a) Neuropathic joints
  - b) Adrenal incidentalomas
  - c) Anomalies of aortic arch
  - d) Ileo caecal valve
  - e) Imaging of cerebral AVM
- 9. Radiographic appearances of pulmonary edema.
- 10. MRI of breast.

#### PULMONARY MEDEICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Sputum examination in diagnosis of pulmonary tuberculosis.
- 2. Investigations and management of abdominal tuberculosis.
- 3. B.C.G. Vaccination.
- 4. Role of corticosteroids in tuberculosis management.
- 5. Bronchial artery embolization.
- 6. Aspergilloma.
- 7. Management of tuberculous lymphadentis.
- 8. XDR TB
- 9. Treatment of tuberculosis in a immuno compromised host.
- 10. Atypical mycobacteria.

# M.D. DEGREE EXAMINATION – APRIL, 2010 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Give an account of microbiology and infections caused by Treponema Pallidum.
- 2. Write an essay of chalmydiae which cause human disease.
- 3. List the invasive enteric infections. Describe the pathogenicity and laboratory diagnosis of one of them.
- 4. Write an essay on pertusis.
- Discuss the laboratory diagnosis of extra pulmonary tuberculosis.Add a note on newer tests.
- 6. Discuss the aetiopathogenesis and laboratory diagnosis of tetanus.
- 7. Give an account of campylobacter.
- 8. Discuss the laboratory diagnosis of acute meningitis.
- 9. Write an essay on human shigellosis.
- 10. Give an account of laboratory diagnosis of urinary tract infections.

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# M.D. DEGREE EXAMINATION – APRIL, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss in brief the use of epidemiology.
- 2. Discuss the strategy for Elimination of Leprosy in India.
- 3. Discuss the concept of Sickness, Illness and Morbidity.
- 4. "Bird Flue has emerged as Pandemic". Give your comments.
- 5. Endemic Flurosis in Andhra Pradesh.
- 6. Success story of eradication of Small Pox from India.
- 7. Strategy for HIV/AIDS Prevention in your state.
- 8. Elimination of Measles in India.
- 9. Epidemiology of Diabetes.
- 10. Surveillance in Leprosy Eradication.

# M.D. DEGREE EXAMINATION – APRIL, 2010 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Pathophysiology of delirium.
- 2. Post concussional syndrome.
- 3. Hypochondriasis.
- 4. Sub cortical dementias.
- 5. Chronic Fatigue Syndrome.
- 6. Neuro Imaging in Psychiatry.
- 7. Newer Antiepileptics.
- 8. Apraxias.
- 9. Irritable Bowel Syndrome.
- 10. Hachinski's Ischaemic Index.

#### **BIOCHEMISTRY**

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Enumerate porphyrinopathies with their enzymatic defects.

  Describe their relationship to the laboratory findings.
- 2. Describe the role of vitamin D with special reference to calcium and phosphorus in the body.
- 3. Write an essay on Essential Fatty Acids.
- 4. What are antioxidants? How do they influence our body activities.
- Describe the biochemical tests done in a case of hyperbilirubinemia.
- 6. Describe the synthesis of Haemoglobin. Write a note on spectroscopic examination of Haemoglobin and its derivatives.
- 7. Describe Tricarboxylic acid cycle. Indicate how this cycle is interrelated to common metabolic pathway.
- 8. Describe the sources of purine bases. Describe the synthesis, metabolic aspects and clinical significance of uric acid.
- 9. Describe the structure of Insulin. How will you diagnose NIDDM with the help of biochemical investigations?
- 10. Describe Enzyme Specificity.

#### **PHARMACOLOGY**

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Enzyme inhibitors in Parkinsonism.
- 2. Complications of Diuretic Therapy.
- 3. Treatment of methanol poisoning.
- 4. Naltrexone.
- 5. Mood Stabilizers.
- 6. Cardioselective beta blockers.
- 7. Malignant Hyperthermia.
- 8. Potassium Channel Openers.
- 9. Carbonic anhydrase inhibitors.
- 10. Gabapentin.

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the causes of intracranial haemorrhage.
- 2. Discuss the etiopathology of sub acute bacterial endocarditis.
- 3. Discuss the process of healing of aseptic incised wound.
- 4. Precautions needed while conducting autopsy on HIV positive cases.
- 5. Discuss the microorganisms associated with burns.
- 6. Discuss the methods for solving the cases of disputed paternity.
- 7. Difference between antemortem and postmortem wounds.
- 8. Discuss the pathophysiology of fracture of bone.
- 9. Microbiological investigations needed at autopsy.
- Discuss the problems in diagnosis of tetanus at post-mortem examination.

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Physiology of pregnancy.
- 2. Gastric emptying.
- 3. Endocrine functions of placenta.
- 4. Water absorption by renal tubules.
- 5. Erythroblastosis foetalis.
- 6. Fibrinolytic system.
- 7. Pheochromocytoma.
- 8. Functions of menopause, its basis and treatment.
- 9. Pathophysiology of peptic ulcer.
- 10.Lactation.

#### **RADIOTHERAPY**

Paper-II: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the staging and investigative workup for carcinoma cervix.

  Add a note on management of stage III carcinoma cervix.
- Enumerate the tumours which spread through CSF pathway.
   Describe the clinical features and management of craniopharyngioma.
- 3. Discuss the management of acute spinal cord compression.
- 4. Discuss the clinical features, staging and management of Hodgkin's lymphoma in a child.
- 5. Discuss the management of T1 N0 M0 squamous cell cancer of Lower lip.
- 6. Discuss the procedures of patient positioning in radiotherapy planning.
- 7. 50 year old male is diagnosed to have limited stage small cell carcinoma of lung. Discuss the management of this case.
- 8. Describe the clinical features and management of juvenile nasopharyngeal angiofibroma.
- 9. Write briefly about the genetic effects of radiation.
- 10. Describe the role of survival curves in cancer statistics.

## M.S. DEGREE EXAMINATION – APRIL, 2010 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the clinical feature and management of fracture patella.
- 2. Discuss Pnemothorax.
- 3. Mention the causes of Dysphagia. Describe briefly the clinical features and management of Achalasia Cardia.
- 4. Discuss the differential diagnosis of Lump in the breast in a women aged 50 years.
- 5. Mention the causes of Haemetemisis and describe the clinical features and management of gastric ulcer.
- 6. Classify aneurysm. Discuss the clinical features and management of Dissecting Aneurysm of abdominal aorta.
- 7. Discuss imperforate anus.
- 8. Describe the pathology, clinical features and management of Glomus Tumour.
- 9. Mention the causes of Haematuria and describe the clinical features and management of ureteric calculus.
- 10. Discuss Apudomas.

# M.S. DEGREE EXAMINATION – APRIL, 2010 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

- 1. Classify epiphyseal injuries. Enumerate treatment, prognosis and compliations of epiphyseal injuries.
- 2. Describe the blood supply to talus. Classify fractures of talus and discuss the management.
- 3. Classify shoulder dislocations and outline the management of anterior dislocation.
- 4. Intercondylar fractures of humerus.
- 5. Discuss the management of cervical spine injury with C-5- C 6 fracture dislocation and quadriplegia.
- 6. Galeazzis' fracture dislocation.
- 7. Bohler braun splint.
- 8. Dynamic hip screw.
- 9. Acute Volkman's Ischemia.
- 10. Hand shoulder syndrome.

## M.S. DEGREE EXAMINATION – APRIL, 2010 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Ocular manifestations of Systemic Lupus Erythematosis.

- 2. How will you assess a case of unilateral ptosis?
- 3. How will you investigate a case of Horizontal uncrossed diplopia in a 50 year old person?
- 4. Discuss differential diagnosis for Lid swelling.
- 5. Complications of Lasik.
- 6. Sympathetic ophthalmitis.
- 7. Surgical procedure of scleral fixating lens.
- 8. Von Recklinghausen's disease.
- 9. Pathogenesis and treatment of pterygium.
- 10. a) Superior limbic keratitis.
  - b) Sclerokeratitis

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## M.S. DEGREE EXAMINATION – APRIL, 2010 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write an essay on aetiopathogenesis, clinical features and management of acquired cholesteatoma.
- 2. Discuss the aetiopathogenesis of subglotic stenosis and its management.
- 3. Describe the pathology clinical features and management of carcinoma of the maxillary sinus.
- 4. Discuss the aetiopathology of fungal infections in nose and paranasal sinuses with its management.
- 5. Describe in detail the voice rehabilitation management after total laryngectomy.
- 6. What is Lefort type III fracture? Discuss its management.
- 7. Describe the pathogenesis of otitis media with effusion and its management.
- 8. Discuss the theories of aetiopathology, clinical features and management of Atrophic Rhinitis.
- 9. Describe the surgical anatomy of cerebello-pontine angle and write about Acoustic Neuroma.
- 10. Write short notes on:
  - a) Pharyngeal pouch
  - b) Plemorphic adenoma
  - c) Septal abscess

## M.D. DEGREE EXAMINATION – APRIL, 2010 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Arterial supply of the pancreas.
- 2. Tempero mandibular joint and movements.
- 3. Organ of corti.
- 4. Formation and branches of Branchial plexus.
- 5. Venous perforaters of the leg.
- 6. Alcock's canal.
- 7. Spinal meninges.
- 8. Locking and unlocking mechanism of knee joint.
- 9. Typical intercostal space.
- 10. Stability of the shoulder joint.

## M.D. DEGREE EXAMINATION – APRIL, 2010

### D.V.L.

## Paper-II

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Becker's nevus.
- 2. Hidradenitis suppurativa.
- 3. Oral lichen planus.
- 4. Raynaud's phenomenon.
- 5. Shagreen patch.
- 6. Differential diagnosis of pustular lesions in neonate.
- 7. Buruli's ulcer.
- 8. Impetigo herpetiformis.
- 9. Epidermolytic hyperkeratosis.
- 10. Imiquimod.

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## M.D. DEGREE EXAMINATION -APRIL, 2010

#### GENERAL MEDICINE

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. X-linked muscular dystrophies.
- 2. Recent concepts in the management porphyrias.
- 3. Management of cyanide poisoning.
- 4. Diagnosis and management of thalassemias.
- 5. Non alcoholic steatohepatitis.
- 6. Peduncular hallucinosis.
- 7. Dermatologic manifestations of gastrointestinal disorders.
- 8. Malignant hypertension and its management.
- 9. Anagrelide.
- 10. Prognostic scoring system in myelodysplastic syndromes.

# M.D. DEGREE EXAMINATION – APRIL, 2010 OBSTETRICS & GYNAECOLOGY POR III. Gynaecology including Family Planning

Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss diagnosis and management of ureteral fistulae.
- 2. Critically evaluate various intra uterine contraceptive devices (I.U.C.Ds).
- 3. Discuss prognostic factors in Cancer Cervix.
- 4. What are the current concepts in etio pathogenesis of polycystic ovarian disease (PCOD).
- 5. Write short notes on:
  - a) Perineal body
  - b) Non gestational chorio carcinoma.
- 6. Discuss differential diagnosis of ulcer on vulva.
- 7. Discuss various sling procedures for stress incontinence.
- 8. Describe pathology of virilising tumours of ovary.
- 9. Correlate endometriosis and infertility.
- 10. Write short notes on:
  - a) Ashermenn's Syndrome
  - b) Ru 486

## M.D. DEGREE EXAMINATION – APRIL, 2010 PAEDIATRICS

# Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. a) Classify vitamins.
  - b) WHO classification of vitamin A deficiency and management of 2 year old child with corneal ulcer.
- 2. Write briefly about feeding problems during 1<sup>st</sup> year of life.
- 3. Clinical features, management of complication of nutritional rickets in children.
- 4. Etiology features, clinical manifestations, diagnosis, complications of management of Dengue Haemorrhagic Fever.
- 5. a) Bornholm disease
  - b) Acute hepatic gingivo stomatitis.
- 6. Etiology, clinical features, management and complications of enteric fever.
- 7. Write briefly about "T-Lymphocytes".
- 8. Algorithm for evaluation of a patient with Leucopenia.
- 9. Differential Diagnosis of child hood asthma.
- 10.Oral Candidiasis.

#### 114-NR

## M.D. DEGREE EXAMINATION – APRIL, 2010 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the preoperative lung function tests for a case posted for pneumonectomy.
- 2. Describe the management of head injury patient in an ICU.
- 3. Discuss the anaesthetic management of a newborn infant with Large Encephalocole posted for corrective surgery.
- 4. Discuss the emergency resuscitation in a burns patient.
- 5. Discuss the systemic changes and problems of pneumoperotonium during Laproscopic surgery.
- 6. Write a note on placental exchanges of Drugs.
- 7. Outline the anaesthetic management of a 60 years old man with hypertension posted for TURP (Transurethral resection of prostate).
- 8. Outline the post anaesthesia care management.
- 9. Discuss the anaesthesiologist role in Mitral stenosis pregnant lady.
- 10.Describe the anaesthetic management for a separation of a conjoined twin neonates.

## M.D. DEGREE EXAMINATION – APRIL, 2010 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Phorphyrias
- 2. Preleukemic syndromes.
- 3. Infectious mononucleosis.
- 4. Quality control in haematology.
- 5. FNAC of thyroid neoplasms.
- 6. Laboratory diagnosis of diabetes mellitus.
- 7. Leukocyte function tests.
- 8. Disorders of platelet function.
- 9. Blast crisis
- 10. Electrophoresis.

## M.D. DEGREE EXAMINATION – APRIL, 2010 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Therapeutic interventions of liver tumours.
- 2. Bronchial artery embolization.
- 3. Foregut Duplication Cysts.
- 4. Write short notes on:
  - a) Choledochal Cysts
  - b) Gastro Oesophageal Reflux
  - c) Madelung deformity
  - d) Virtual endoscopy
  - e) Epispadias exstrophy complex
- 5. Radiological features of malabsorption syndrome.
- 6. Pseudotumour of the orbit.
- 7. Write short on:
  - a) Filters
  - b) Grids
  - c) Elastography
  - d) Congenital pancreatic anomalies
  - e) Bronchiolitis
- 8. Imaging in Arnold Chiari malformations
- 9. Role of US in first trimester bleeding
- 10. Percutaneous nephrostomy

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## M.D. DEGREE EXAMINATION – APRIL, 2010 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Ventilator associated pneumonias.
- 2. Management of obstructive sleep apnoea.
- 3. High altitude pulmonary oedema.
- 4. Effect of toxic fume inhalation.
- 5. Acute respiratory distress syndrome.
- 6. Management of acute severe asthma in a 35 year old man.
- 7. COPD rehabilitation.
- 8. Primary tumours of the pleura.
- 9. Pulmonary embolism prevention and treatment.
- 10. Management of tension pneumothorax.

## M.D. DEGREE EXAMINATION – APRIL, 2010 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. List the parasites and fungi associated with HIV (Human Immunodeficiency Virus) infection. Describe the methods of demonstration of pneumocystis.
- 2. Describe the structure of rabies virus. Discuss the immunoprophylaxes of rabies.
- 3. List the haemoflugellates. Describe the life cycle and laboratory diagnosis of one of them.
- 4. Give an account of coronaviruses.
- 5. Describe the general features of viral carcinogenesis. Add a note on molecular biology of viral induced malignancy.
- 6. Describe the morphology, life cycle and laboratory diagnosis of Brugian filariasis.
- 7. Discuss the laboratory diagnosis of intestinal helminthic infections.
- 8. Write an essay on cultivation of viruses and their applications.
- 9. Describe the morphology of Aspergillus. Discuss the diseases caused in humans.
- 10. Give an account of blastomycosis.

# M.D. DEGREE EXAMINATION – APRIL, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,
Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the Information, Education and Communication Approach in Reproductive and Child Health Programme in India.
- 2. Discuss the Community Involvement in Total Sanitation Campaign.
- 3. Discuss the strategy for Operationalization of First Referral Unit.
- 4. Suggest how you will plan for prevention of Infant Mortality in a District.
- 5. Give a plan to Promote Family Life Education in your State.
- 6. Write Bacteriological standards of Drinking Water for rural India.
- 7. Emergency Contraceptive.
- 8. Describe in brief the health problems of Farmers.
- 9. Concept of social Security and give few examples.
- 10.Describe in brief role of ANM at sub Centre.

## M.D. DEGREE EXAMINATION – APRIL, 2010 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Post traumatic stress disorder.
- 2. Puerperal psychosis.
- 3. Metabolic syndrome.
- 4. Assessment of negative symptoms.
- 5. Modified ECT.
- 6. Quality of life.
- 7. Bipolar spectrum disorders.
- 8. Schizo affective psychosis
- 9. Psychiatric manifestations of hypothyroidism.
- 10. Psychosocial management of schizophrenia

## M.D. DEGREE EXAMINATION – APRIL, 2010 BIOCHEMISTRY

Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Explain the hormones and their biochemical actions that regulate glycogen metabolism.
- 2. Describe the biochemical mechanism underlying one carbon units. What are the clinical features of Folic acid deficiency?
- 3. Define Respiratory Quotient. Describe its relation to major food substances.
- 4. Discuss the chemistry, functions and metabolic role of Riboflavin including deficiency manifestations.
- 5. What are catacholamines? How are they formed in the body? Describe their metabolism clinical and biochemical aspects.
- 6. Describe the Common Serum Electrolytes in the body. How are Sodium and Potassium regulated with special reference to hormones?
- 7. How is ammonia formed and metabolized in the body? Write a note on the inborn errors associated with it.
- 8. Describe Hexose Mono Phosphate shunt pathway and its significance.
- 9. What are glucosaminoglycans? Describe the various types and functions of proteoglycans.
- 10.Describe the nutritional importance of lipids. What are the general and proximate principles you will adopt in prescribing a diet chart for a Diabetes Mellitus person of 2200 K Cal. Give an example of a diabetic diet chart.

## 154-NR M.S. DEGREE EXAMINATION – APRIL, 2010 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Antiplatelet Drugs.
- 2. Mechanism of antimicrobial drug resistance.
- 3. Nucleoside reverse transcriptase inhibitors.
- 4. Artemisinin.
- 5. Drugs used in hepatic amoebiasis.
- 6. Radioactive isotopes in chemotherapy of malignancy.
- 7. Rosiglitazone.
- 8. Selective oestrogen receptors modulators (SERMs).
- 9. Amphotericin B.
- 10. DOTS (Directly Observed Treatment Short Course) regimens in Tuberculosis.

## M.D. DEGREE EXAMINATION – APRIL, 2010 FORENSIC MEDICINE

### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Classify and describe the entrance wounds produced by shot gun.
- 2. Classify sexual offences and discuss custodial rape.
- 3. Postmortem findings in cases of death due to starvation.
- 4. Discuss the role of photography in Forensic Medicine.
- 5. Define negative autopsy and discuss its causes.
- 6. Difference between dying declaration and dying deposition.
- 7. Discuss the causes and medicolegal importance of suspended animation.
- 8. Postmortem findings in cases of death due to dry drowning.
- 9. Presumption of survivorship and presumption of death.
- 10. Define and discuss professional negligence.

## M.D. DEGREE EXAMINATION – APRIL, 2010 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Tractus solitarius.
- 2. Functions of middle ear.
- 3. Pyramidal tract and differences between UMN & LMN lesions.
- 4. Blood-brain barrier.
- 5. Servo mechanism.
- 6. Dr. B.K. Anand's contributions to physiology.
- 7. Ventilation perfusion ratio.
- 8. Dark adaptation and its physiological basis.
- 9. Regulation of cardiac output.
- 10. Memory.

## M.D. DEGREE EXAMINATION – APRIL, 2010 RADIOTHERAPY

Paper-III: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What do you understand by the term Dose volume histogram? Discuss its clinical significance.
- 2. Define and discuss the significance of target volumes in radiotherapy.
- 3. Discuss the role of radiation in the management of carcinoma stomach and the techniques used.
- 4. Write briefly on AIDS related cancers.
- 5. Discuss the various systems of brachytherapy for interstitial treatment.
- 6. Discuss the staging and role of radiotherapy in the management of rectal cancer.
- 7. Enumerate the causes of radiation therapy failure during the treatment and discuss the methods employed to overcome.
- 8. Discuss the concepts of sublethal and potentially lethal damage.
- 9. Describe the management of hypocalcaemia.
- 10. Define tissue air ratio and discuss its importance in treatment planning.

## M.S. DEGREE EXAMINATION – APRIL, 2010 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the development, clinical features and management of thyroglossal cyst.
- 2. Discuss the clinical features and management of aguired heart disease.
- 3. Write the clinical features and management of Oesophageal Atrasia.
- 4. Discuss choledocal cyst.
- 5. Write briefly the aetiology, clinical features and management of intussuseption.
- 6. Describe the clinical features of ventral hernia.
- 7. Mention the various cystic lesions of the kidney and discuss the management of polycystic kidney.
- 8. Discuss Blind loop syndrome.
- 9. Describe the clinical features and management of Psedo-pancreatic cyst.
- 10. Describe the clinical features and management of Portal Pyaemia.

# M.S. DEGREE EXAMINATION – APRIL, 2010 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Slipped upper femoral capital epiphysis.
- 2. Ewing's sarcoma.
- 3. Radio isotopes in orthopaedics.
- 4. Tom Smiths' Arthritis (Infantile Septic Arthritis Hip)
- 5. Congenital talipes equino varus (Idiopathic)
- 6. Pseudarthrosis Tibia
- 7. Bone transport
- 8. Tendon transfers for radial nerve paralysis.
- 9. Spondylolisthesis L<sub>5</sub> over S<sub>1</sub>.
- 10. Primary and secondary curves in scoliosis.

## M.S. DEGREE EXAMINATION – APRIL, 2010 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Treatment of Contracted Empty Socket.
- 2. Aetiology and management of pulsatile proptosis.
- 3. Pathogenesis of ARMD.
- 4. Discuss the Principles in the management of Rhegmatogenous retinal detachment.
- 5. Vison 2020.
- 6. Management of Anterior Ischaemic Optic Neuropathy.
- 7. How will you assess a person who is malingering visual loss?
- 8. Aetiology, clinical features and management of orbital cellulites.
- 9. Define and classify amblyopia. Briefly discuss about occlusion therapy.
- 10. a) Silicon Oil
  - b) Internuclear ophthalmoplegia

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## M.D. DEGREE EXAMINATION – APRIL, 2010

#### OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss facio-maxillary injuries and their management.
- 2. Describe the clinical features, classification and management of glomus Jugulare.
- 3. What do you understand by laryngeal framework surgery? Describe them briefly.
- 4. Discuss the role of revision stapedectomy in failed cases of first surgery.
- 5. Describe the complications of prolonged nasotracheal intubation and brief management.
- 6. Describe the aetiopathology of CSF Rhinorrhea and its management.
- 7. Discuss the indications and different types of flaps used in head and Neck reconstructive surgery.
- 8. Discuss the aetiology and management of epistaxis including surgical and interventional radiotherapy.
- 9. Discuss Rhinosporidiosis and its management.
- 10. Write short notes on:
  - a) Dysphagia lusoria
  - b) Cochlear microphonics
  - c) Gradenigo syndrome

## M.D. DEGREE EXAMINATION – APRIL, 2010 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Karyotype.
- 2. Histology of lymphnode.
- 3. Numerical chromosome abnormalities.
- 4. Mounting agents.
- 5. Histology of placenta.
- 6. Maintenance of museum.
- 7. Dermatoglyphics.
- 8. Histological changes of Respiratory tract.
- 9. Embalming technique.
- 10. Functional changes in G.I.T. (Gastro intestinal tract).

# M.D. DEGREE EXAMINATION – APRIL, 2010 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Silent neuritis.
- 2. Histoid leprosy.
- 3. Morphological index.
- 4. Lagophthalmos.
- 5. Thalidomide.
- 6. Benign tertiary syphilis.
- 7. Bubo.
- 8. Window period
- 9. Non-gonococcal urethritis.
- 10. Pearly penile papules.

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## M.D. DEGREE EXAMINATION – APRIL, 2010 GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Cutaneous leishmaniasis.
- 2. Cholera toxins and their mechanisms of action.
- 3. Malarial vaccines.
- 4. Clinical features of Weil's disease.
- 5. Management of listeroiosis.
- 6. Viral opportunistic infections in acquired immunodeficiency syndrome.
- 7. Endemic fluorosis.
- 8. Management of heat stroke.
- 9. Staphylococcal toxin mediated diseases.
- 10. Pulmonary manifestations of parasitic infections.

## M.S. DEGREE EXAMINATION – APRIL, 2010

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetricts and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss etiology of jaundice in pregnancy.
- 2. Evaluate screening procedures for Gestational diabetes.
- 3. Discuss pathogenesis of Endotoxic shock.
- 4. What are the causes of retention of urine in a 15 year old girl.
- 5. Write short notes on:
  - a) B thalassemia
  - b) Fundoscopy in pregnancy induced hypertension
- 6. What are the common surgical problems in obstetrics?
- 7. Discuss the use and abuse of corticosteroids in Gynaecology.
- 8. What is the obstetric management in a patient with renal Transplant?
- 9. How will you manage a patient with sudden collapse in post operative period?
- 10. Write short notes on:
  - a) Mendelsone syndrome
  - b) Acute transfusion

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## M.D. DEGREE EXAMINATION – APRIL, 2010 PAEDIATRICS

Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Etiology, clinical features, management and complications of Tuberculous Meningitis in children.
- 2. Enumerate the causes of Recurrent stridor in children.
- 3. Environmental factors associated with Increased risk of Sudden Infant Death Syndrome.
- 4. Write short notes on:
  - a) Epistaxis
  - b) Malocclusion of teeth
- 5. Causes of Portal hypertension, clinical features, diagnosis, management and complications of portal hypertension.
- 6. Write briefly about Gastro-esophageal reflux diseases (GERD).
- 7. Cleft palate with Cleft Lip, Clinical Manifestations and Treatment and complications.
- 8. Presenting manifestations of systemic lupus Erythematosis, Diagnosis of treatment of the same.
- 9. Diagnosis, Lab findings and treatment of Reactive Arthritis.
- 10. Iron deficiency anaemia in children and preventing the Iron deficiency of anaemia.

## M.D. DEGREE EXAMINATION – APRIL, 2010 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anaesthetic management of a case with a permanent DDDMP permanent pacemaker.
- 2. Outline the anaesthetic management for a case of Liver transplantation.
- 3. Mention the advantages and disadvantages of various gases used during Laparoscopic surgery for pneumoperitonium.
- 4. Write a note on "RES IPSA LOQUITUR".
- 5. How do you manage a patient on oral antidiabetic drug for CABG (Coronary Artery Bypass Graft).
- 6. Discuss the anaesthetic management in a patient of bronchial asthama posted for emergency laprotomy.
- 7. Define massive blood transfusions. Describe the complications and management of massive blood transfusion.
- 8. Discuss the place of Plasma Expanders and Blood substitutes in anaesthesia practice.
- 9. Describe the anaesthetic management of a patient with "Sickle Cells Crisis" coming for acute abdomen.
- 10. Discuss the problems and anaesthetic management during squint corrective surgery.

## M.D. DEGREE EXAMINATION – APRIL, 2010 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Bone Marrow Transplantation.
- 2. Fluorescence in situ hybridization (FISH) technique.
- 3. Role of free radicals in health and disease.
- 4. Pulmonary lymphoproliferative diseases
- 5. Liver diseases in infancy and childhood.
- 6. Hemoparasites and recent diagnostic modalities.
- 7. Vesiculo-bullous lesions of skin.
- 8. Molecular basis of cancer.
- 9. Gene therapy.
- 10. Molecular basis of thalassemia.

## M.D. DEGREE EXAMINATION – APRIL, 2010 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write briefly about MR Urogram.
- 2. Role of MR imaging in acute stroke.
- 3. Aorto arteritis.
- 4. Write short notes on:
  - a) MRI artifacts
  - b) Avascular necrosis hip
  - c) Coarctation of aorta
  - d) Chordoma
  - e) Normal pressure hydrocephalus
- 5. Imaging approach in spinal trauma.
- 6. Pulmonary sarcoidosis.
- 7. Constrictive pericarditis
- 8. Writ short notes on:
  - a) Role of USG contrast agents in GIT disease
  - b) MRA
  - c) Pulmonary microlithiasis
  - d) PTC
  - e) MR features of endometriosis
- 9. Discuss MR features of benign and pathological vertebral collapse.
- 10. Isotope renogram.

## M.D. DEGREE EXAMINATION – APRIL, 2010 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of tuberculosis in paediatric patients under RNTCP.
- 2. Pharmacotherapy of COPD.
- 3. Burden of tuberculosis in India.
- 4. Stenting of tracheobronchial tree.
- 5. Management of a patient with treatment failure under DOTS programme.
- 6. Endobronchial ultrasound.
- 7. Autofluorescence bronchoscopy.
- 8. Photodynamic therapy for endobronchial tumors.
- 9. Management of cystic fibrosis.
- 10. Indications and contraindications for lung transplant.

## M.D. DEGREE EXAMINATION – APRIL, 2010

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write an essay on guidelines on infection control for a 400 bedded hospital.
- 2. Write an essay on quality assurance in clinical microbiology.
- 3. Describe the role of microbiologist in HIV prevention.
- 4. Give an account of recent advances in sterilization and disinfection.
- 5. Write an essay on microbiology of air.
- 6. Write an essay on apoptosis.
- 7. Write an essay on recent advances in streptococcal research.
- 8. Give an account of bacterial food poisoning.
- 9. Write an essay on normal gut flora.
- 10. Write an essay on vaccines for health care workers.

## M.D. DEGREE EXAMINATION – APRIL, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the principles of Primary Health Care with examples.
- 2. Discuss the salient features of Kartar Singh Committee report.
- 3. Alternative Health Financing options.
- 4. Discuss the role of Monitoring and Supervision in Health Care Delivery.
- 5. Discuss the Barriers in Effective Communication.
- 6. Describe in brief the objectives and strategy in Revised National Tuberculosis Programme.
- 7. Primary Health Care in Urban Area.
- 8. Describe in brief the National AIDS Control Programme.
- 9. Describe the salient points from National Population Policy 2000.
- 10. Discuss the role of community participation in health care delivery.

## M.D. DEGREE EXAMINATION - APRIL, 2010

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Treatment of mental subnormality.
- 2. Late life depression.
- 3. Criminal responsibility.
- 4. Inter personal psychotherapy.
- 5. Tic disorders in children.
- 6. Adaptive skills.
- 7. Cluster 'B' personality disorders.
- 8. Autistic spectrum disorders.
- 9. Relapse prevention in alcoholism.
- 10. Neuro psychiatric aspects of Epilepsy.

## M.D. DEGREE EXAMINATION – APRIL, 2010 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the sources, metabolism, absorption and fate of IRON in the body. Write its clinical aspects.
- 2. What is Radio Active Decay? How is radioactivity detected and measured?
- 3. Write briefly on Respiratory Acidosis. How is it compensated and regulated?
- 4. A short plumpy woman has a swelling in the neck region. She is sensitive to cold has dry skin and hoarseness of voice. How will you clinch your diagnosis with tests of recent advances in clinical chemistry?
- 5. Describe Transamination Reactions with suitable clinical and biochemical applications.
- 6. Write an essay on good and bad cholesterol. Describe the synthesis, metabolism and clinical importance of Cholesterol.
- 7. What is malabsorption syndrome? How will you investigate such a case?
- 8. Give an account of lipoprotein separation and hyperlipidemias.
- 9. Write briefly on
  - a) Refsum's disease
  - b) Fructosamine estimination and its applications.
- 10. If you are asked to be in-charge of a clinical laboratory biochemical service section in a teaching hospital, briefly discuss how would you organise such a laboratory. Mention a few biochemical hazards while organizing such a laboratory.

### M.D. DEGREE EXAMINATION – APRIL, 2010

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Drugs used in Glaucoma.
- 2. Drug treatment of Schizophrenia.
- 3. Drug therapy of Giardiasis.
- 4. Treatment of Benign Prostate Hypertrophy.
- 5. Drug therapy of alopecia.
- 6. Treatment of chemotherapy induced vomiting.
- 7. Drug therapy of acne vulgaris.
- 8. Treatment of acute attack of bronchial asthma.
- 9. Drugs used in acute myocardial infarction.
- 10. Treatment of megaloblastic anaemia.

## M.D. DEGREE EXAMINATION – APRIL, 2010 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss formation and functions of State Medical Council.
- 2. Define consent and discuss the requirements of valid consent.
- 3. Discuss responsibilities of mentally ill persons.
- 4. Discuss the common types of delusions with examples.
- 5. Discuss Testamentary capacity and its medico legal importance.
- 6. Discuss the requirements of ideal suicidal and homicidal poisons.
- 7. Clinical features and treatment of Methyl Alcohol poisoning.
- 8. Discuss the classification of insecticides with examples.
- 9. Discuss Vitriolage and its medico legal aspects.
- 10. Discuss the duties of medical practitioner in dealing with a case of suspected poisoning.

## M.D. DEGREE EXAMINATION – APRIL, 2010

#### SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

## All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Role of vestibular system in maintaining posture and equilibrium.
- 2. Transplant rejection.
- 3. Heat stroke.
- 4. Neurotrophins.
- 5. Referred pain.
- 6. Olfactory pathway.
- 7. Thalamic syndrome.
- 8. Pheromones.
- 9. Parkinson's disease.
- 10. conditioned reflexes.

### M.D. DEGREE EXAMINATION – APRIL, 2010 RADIOTHERAPY

Paper-IV: Clinical subjects in relation to Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Enumerate the complications occurring following radical radiation therapy for carcinoma cervix and discuss their clinical management.
- 2. Discuss the role of tumour markers in oncology.
- 3. Discuss the technique and indications of stereotactic radiosurgery.
- 4. Write briefly the role of radiotherapy in benign conditions.
- 5. Discuss the role of proton therapy in cancers.
- 6. Discuss the radiation effects on spinal cord.
- 7. Describe the predictive assays used in radiotherapy.
- 8. Discuss the physical characteristics of I-125 and its role in nuclear medicine.
- 9. Discuss the technique and advantages of 3D conformal radiotherapy over 2D radiotherapy.
- 10. Role of hormonal treatment in oncology.

### M.S. DEGREE EXAMINATION – APRIL, 2010 GENERAL SURGERY

Paper-IV : General Surgery, Operative Surgery including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the minimal access surgery in acute abdomen.
- Describe the aetio-pathogenesis clinical features and management of renal injury.
- 3. Discuss thyroid nodule.
- 4. Describe the clinical, signs and symptoms and management of carotid body tumours.
- Classify the tumours of cheek and discuss, aetio-pathogenesis and management of carcinoma cheek.
- 6. Mention the indications for sympathectomy and describe the operative procedure of cervico-dorsal sympathectomy.
- 7. Mention the management tumours of skins and describe the clinical features and management of Basal Cell Carcinoma.
- 8. Discuss DESMOID tumour.
- 9. Discuss Breast Re-Construction.
- 10. Write briefly the aetio-pathogenesis of sailolithiasis. Discribe the management of submandibular calculi.

## M.S. DEGREE EXAMINATION – APRIL, 2010 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Total knee replacement in osteoarthrosis.
- 2. Limb salvage procedure in osteoclastoma medical condyle femur.
- 3. Bone cement.
- 4. Hip resurfacing.
- 5. A.O. Locking compression plate.
- 6. Advance Trauma life support system.
- 7. Complications of interlocking nails.
- 8. Recent trends in the management of tuberculosis of spine.
- 9. Ponsettis' method of treatment of clubfoot.
- 10. Musculo skeletal manifestations of AIDS (HIV).

### M.S. DEGREE EXAMINATION – APRIL, 2010 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Gene Therapy.
- 2. Rehabilitation of the blind.
- 3. Anti VEGF.
- 4. Stem cell transplantation.
- 5. M.R.I. in ophthalmology Merit and demerits.
- 6. LASIK and LASEK.
- 7. Endo nasal DCR.
- 8. Hydrodynamics of Phaco.
- 9. Multifocal IOL.
- 10. a) H.R.T.
  - b) Keratoprosthesis.

### 183-NR M.S. DEGREE EXAMINATION – APRIL, 2010 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Newer trends in Radiological imaging with respect to ENT, Head and Neck Surgery.
- 2. Define Sleep Apnoea Syndrome. Enumerate the causes and discuss its management.
- 3. How will you evaluate a pre-lingually deaf child? Write a note on Cochlear implant.
- 4. What are the complications following head and neck surgery and its management.
- 5. Discuss different types of Rhinoplasty and management of saddle nose deformity.
- 6. Discuss facial nerve-course, grafting and prognosis.
- 7. Write in detail the lymphatic drainage in head and neck cancer.
- 8. Discuss the aetiopathology, clinical features and management of Otogenic Brain Abscess.
- 9. Describe the various methods of rehabilitation of laryngectomised patient.

#### 10. Short notes.

- a) Perilymph fistula.
- b) objective tinnitus.
- c) Laryngomalacia.

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## M.D. DEGREE EXAMINATION – APRIL, 2010 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Development of heart and its anomalies.
- 2. Development of male external genitalia and anomalies.
- 3. Primitive streak.
- 4. Cister na.
- 5. Constituent fibres and arterial supply of internal capsule.
- 6. Connections and functions of Basal ganglia.
- 7. Development of placenta and anomalies.
- 8. Fate of Ist pharyngeal arch.
- 9. Development of midgut loop and anomalies.
- 10. Glossopharyngeal nerve and lesions.

### M.D. DEGREE EXAMINATION – APRIL, 2010

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Pellagra.
- 2. Lichen amyloidosis.
- 3. Dermatitis artefacta.
- 4. Sezary syndrome.
- 5. Dermatogenic enteropathy.
- 6. Kimura's disease.
- 7. CREST syndrome.
- 8. Cyclosporin in dermatology.
- 9. Senile pruritus.
- 10. Hirsuitism.

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100-NR

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

## GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Human genome project.
- 2. CD4+T cells.
- 3. Drug dose adjustment in chronic renal disease.
- 4. Sirolimus.
- 5. Blood cells component therapy.
- 6. Adverse drug reactions.
- 7. Insulin analogues.
- 8. Chotestasis.
- 9. Metabolic syndrome.
- 10. Flexible fiber optic bronchoscopy.

### M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the development of uterus and its anomalies.
- 2. Describe the lymphatic drainage of vulva and its importance.
- 3. Describe the physiology of lactation and drugs used to suppress lactation.
- 4. Describe the iron metabolism in pregnancy.
- 5. Describe the various methods to diagnose diabetes mellitus in pregnancy.
- 6. Describe the pathology of cancer cervix.
- 7. Describe the pathology of salpingitis.
- 8. Discuss the microbiology of puerperal sepsis.
- 9. Discuss the importance of nutrition during pregnancy.
- 10. Discuss the role of  $\beta$  mimetics in obstetrics.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Pulmonary function tests and their interpretation in chronic Asthma.
- 2. Interpretation of Liver function test in a 2-month infant presenting with Jaundice.
- 3. Descent of tests and management of undescended testes.
- 4. Lab tests to differentiate pre renal from intrinsic renal failure.
- 5. Corticospinal tract and localization of site of lesion in a child with Hemiplegia.
- 6. Patho physiology of shock.
- 7. "Hematopoetic stem cells". Indication for stem cell transplant in children.
- 8. Defense mechanism and metabolic functions of lung.
- 9. Synthesis of hormones of Adrenal cortex, management of congenital adrenal hyperplasia.
- 10. Haemostatic mechanism in children.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anatomy of typical intercostal nerve. Discuss the technique of block, indications and complications of block.
- 2. Describe in detail low flow closed circuit anaesthesia.
- 3. Mention the differences between clonidine and dexamedetomidine.
- 4. Define and explain the anaesthetic implications of (a) Laplace's Law (b) Hagen Pocsalle's Law.
- 5. Discuss about bronchopulmonary segments and anaesthetic implications.
- 6. Write Sir Ivan Magills contributions to anaesthesia.
- 7. Describe the physical principles underlying the measurement of carbon dioxide concentrators in the expired gas using infrared spectroscopy and Raman spectroscopy.
- 8. Write the proliferation of extra junctional receptors and anaesthetic implications.
- 9. Enumerate the physiological and pharmacological factors affects the MAC (Minimum Alveolar Concentration).
- 10. Discuss about factors affects the pulmonary vasoconstriction.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe in detail pathology of cytoskeletal abnormalities.

- 2. Describe the role of oxygen radicals in inflammation.
- 3. Describe the mechanisms of Bacterial injury.
- 4. Describe pathogenesis of thrombosis.
- 5. Discuss briefly the Diagnosis of genetic diseases.
- 6. Describe pathogenesis of H.I.V. disease.
- 7. Describe Knudson's Two Hit hypothesis.
- 8. Discuss pathology of Vitamin 'C' deficiency.
- 9. Discuss classification and pathogenesis of Amylodosis.
- 10. Discuss in detail pathology of reactions in Leprosy.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 RADIO DIAGNOSIS

Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the modern X ray tube and properties of X rays that are made use in Medical radiology.
- 2. Describe Radiological anatomy of the duodenum and radiological appearances in different pathological conditions of duodenum.
- 3. Write short notes on:
  - a) Turner's Syndrome
  - b) Haemophilia
- 4. Describe the differential diagnosis and radiological features of a tumour at the lower end of the femur in an 18 year old individual.
- 5. How do you classify pulmonary hypertension? Describe briefly the radiological features of acute and chronic pulmonary venous hypertension.
- 6. Write short notes on:
  - a) Tumoral calcinosis
  - b) Causes of Rib notching
- 7. Write short notes on:
  - a) Myositis ossificans progressive
  - b) Craniostenosis
- 8. Write short notes on:
  - a) Meig's Syndrome
  - b) Polycystic Kidney
- 9. Discuss in short the radiological findings of carcinoma stomach.
- 10. Classify bone tumours and radiological features of Ewing's Sarcoma.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Blood supply of lungs.
- 2. Diaphragmatic hernia and eventration.
- 3. Newer cephalosporins.
- 4. Aerosol therapy.
- 5. Organism causing hospital acquired pneumonia.
- 6. Diffusion studies (DLCO).
- 7. Pathogenesis of bronchial asthma.
- 8. The fall and rise phenomenon in tuberculosis.
- 9. Staging of lung cancer.
- 10. Mechanism of cough reflex.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Trace the history of Microbiology from Jenner to Genes.
- 2. Rapid methods used in diagnosis (species) of Enterobacteriaceae.
- 3. Plasmids.
- 4. Water analysis.
- 5. Dermal tests.
- 6. HLA Antigens.
- 7. Write an essay on Complement Pathway
- 8. Discuss artificial Immunity.
- 9. Give an account of Type III Hypersensitivity reactions
- 10. Super antigens.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the social gradient shown distinctly by certain diseases in India.
- 2. Discuss the social marketing of contraceptives in light of National Rural Health Mission.
- 3. Discuss the health problems of working women in light of women's empowerment and corporate social responsibility.
- 4. Discuss the public health significance of Bioterrorism and man made disasters. Add a note on Triage.
- 5. Discuss the interaction between modern medicine and indigenous medicine. Suggest corrective measures to overcome the deficiencies in the health care delivery in rural India.
- 6. Discuss the behavioural research in social medicine. Add a note on role of economics in public health.
- 7. Discuss grievance redressal system with special reference to COPRA and social security.
- 8. Discuss iceberg phenomenon and explain hypertension as lifestyle disorder. Add a note on stroke.
- 9. Discuss epidemiological surveillance with suitable illustrations.
- 10. Discuss the role of Medico Social Worker in healthcare delivery system in India. How MSW can bring about improvements in existing health care delivery in rural areas.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What are G proteins? What are the various steps involved in the signal transduction cascade?
- 2. Discuss the various theories proposed to understand emotions. What is the role of emotions in our lives?
- 3. Define "Cognition". Illustrate the methods of assessing cognition.
- 4. Describe in detail "Neuro pathological changes" in ageing and dementia.
- 5. Define "Emotion. Elaborate on the neuro anatomical substrate.
- 6. Give an over view of applications of multivariate analysis of simple language with examples.
- 7. How does the neuroendocrine approach led to major advances in psychiatry?
- 8. Describe the various theories which help us to understand human motivation. Add a note on the psychosocial determinants of aggression.
- 9. Discuss the various theoretical approaches which aid in understanding personality.
- 10.Discuss the various evidences available to show that there is central nervous system and immune system interactions.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe in detail the structure of aromatic amino acids. How will you diagnose amino acidurias? Give their clinical importance.
- 2. What is Electrophoresis? How is it performed? Describe the various Electrophoretic patterns and their clinical aspects in diagnosis.
- 3. How is ion exchange equilibrated with respect to Donnon's Equilibrium Theory?
- 4. Describe briefly on Radio Immuno Assay.
- 5. What are Non-Protein Nitrogenous substances in the body? Describe the metabolism of any two. Write the biochemical tests done to find out Non-Protein Nitrogenous compounds. Give their clinical importance.
- 6. What are the principles and techniques of a good colorimeter? How will you select a suitable colorimeter for your laboratory? How will you calculate the concentration of Glucose in blood?
- 7. Define osmotic pressure. Discuss its role, regulation and importance with special reference to tissue fluids.
- 8. Describe in detail the structure of Glucosaminoglycans. What are the Biochemical tests done to diagnose muco-polysaccharidosis?
- 9. Describe the three dimensional structure of Proteins.
- 10.Describe the synthesis of creatinine in the body. What are the biochemical features in Muscular contraction during exercise, fatigue and recovery?

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Chromatography.
- 2. Adverse Drug Reaction Monitoring.
- 3. Methods of prolonging the duration of action of a drug.
- 4. Essential drugs.
- 5. Fixed-dose combination of drugs.
- 6. Prodrugs.
- 7. Evaluation of Anticonvulsant Drugs.
- 8. Drug use in extremes of age.
- 9. Pharmacogenomics.
- 10. Pharmacokinetic Drug interactions.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the process of healing of fracture of bone.
- 2. Discuss about superimposition photography.
- 3. Discuss post-mortem artefacts.
- 4. Discuss the factors delaying healing of fractures.
- 5. Discuss the etiology and pathology of post-traumatic emboli.
- 6. Discuss the medicolegal aspects of organ transplantation.
- 7. DNA Finger Printing and its uses in Forensic Medicine.
- 8. Discuss the role of radiology for medicolegal purposes in children.
- Describe the anatomical course of coronary arteries and postmortem diagnosis of myocardial infarction.
- 10. Various types of inquest adopted all over world and their relative significance.

## M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Cytoskeleton.
- 2. Interferons.
- 3. Second messengers.
- 4. Membrane transport proteins.
- 5. Measurement of body fluid volume.
- 6. Strength-duration relationship in nerve.
- 7. Nerve injury.
- 8. Neuromuscular junction.
- 9. Gene knock out technique.
- 10. Muscle proteins.

### M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the development of testes and congenital abnormalities.
- 2. Describe the surgical anatomy of inguinal canal pathophysiology of hernia.
- 3. Describe the blind loop syndrome.
- 4. Describe the anatomy of duodenum and pathophysiology of peptic ulcer.
- 5. Describe the anatomy of the bronchial tree and developmental anomalies of trachea.
- 6. Describe the surgical anatomy and physiology of adrenal glands.
- 7. Describe the depfascia and benign neoplasm of the neck.
- 8. Discuss premalignant conditions and its management.
- 9. Classify hemorrhage and describe its pathophysiology.
- 10. Discuss gangrene.

## M.S. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Brachial plexus and surgical anatomy.
- 2. SACH FOOT.
- 3. Joint lubrication and synovial fluid analysis.
- 4. Calcium metabolism.
- 5. Investigations in multiple myeloma.
- 6. Renal osteodystrophy.
- 7. Radial nerve course in upper limb and management of wrist drop.
- 8. Sudeck's osteodystrophy.
- 9. Erb's palsy.
- 10. Haemophilia.

### M.S. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Pupillary Dialator pathway and its clinical importance.
- 2. Blood aqueous Barrier and its clinical importance.
- 3. Sterilization of ophthalmic instruments.
- 4. Principles and types of Gonioscopy.
- 5. Crystallins.
- 6. Development of the Retina.
- 7. Contrast sensitivity.
- 8. H.L.A. and eye (Human Leucocytic Antigen).
- 9. Antiviral drugs in Ophthalmology.
- 10. a) Apoptosis
  - b) Angle in Buphthalmos

### M.S. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the surgical anatomy of the internal auditory canal and mention its contents.
- 2. Describe briefly the physiology of mastication.
- Anatomy of lamina papyracea and its role in orbital cellulites.
- 4. Discuss different types of lasers used in medicine and CO<sub>2</sub> laser application in ENT.
- Macula of utricle.
- 6. Describe the factors affecting wound healing.
- 7. Describe the intrinsic muscles of the larynx and how it regulates speech.
- 8. Describe the pharmacology of local anaesthetic agents used in ENT.
- 9. What are the components of lower oesophageal sphincter?
- 10. Short notes on:
  - a) Tumour suppressor gene
  - b) Bipolar diathermy
  - c) Clinical photography

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANATOMY

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Bronchopulmonary segments of lung and applied anatomy.
- 2. Supracolic compartment of peritoneal cavity and applied anatomy.
- 3. Surgical anatomy of mammary gland.
- 4. Segmental anatomy of liver and its surgical anatomy.
- 5. Prostate and its applied anatomy.
- 6. Autonomic innervation of lower limb and applied anatomy.
- 7. Abdominal incisions and their clinical significance.
- 8. Clinical anatomy of vertebral column.
- 9. Para nasal air sinuses and applied anatomy.
- 10. Temporomandibular joint and applied anatomy.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### D.V.L.

## Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Structure and cycle of hair.
- 2. Direct immunofluorescence.
- 3. Resident flora of skin.
- 4. Skin and biological warfare agents.
- 5. Imiquimod.
- 6. Cytodiagnosis in dermatology.
- 7. Prenatal diagnosis of skin diseases.
- 8. Gene therapy in dermatology.
- 9. Pathogenesis of psoriasis.
- 10. Acantholysis.

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M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

**GENERAL MEDICINE** 

## Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Prevention of progression of chronic kidney disease.
- 2. Diagnosis of Rheumatoid arthritis.
- 3. Tumor Lysis syndrome.
- 4. Treatment of peripheral neuropathies.
- 5. Bone marrow transplantation.
- 6. Prescribing in elderly.
- 7. Osteoporosis.
- 8. Indications for initiation of ART in HIV infection.
- 9. Dementia.
- 10. Principles of palliative care.

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## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the diagnosis and management of foetal distress.
- 2. What are the causes of maternal mortality? What steps should be taken to reduce it?
- 3. Discuss the management of Rheumatic heart disease complicating pregnancy.
- 4. Discuss the controversies in the management of pre-eclampsia.
- 5. Write short notes on:
  - a) Chorion villus sampling
  - b) Low forceps delivery
- 6. How will you manage septic abortion?
- 7. Discuss the diagnosis of tubal pregnancy.
- 8. Diagnosis and management of abruptio placentae.
- 9. Discuss the management of preterm newborn.
- 10. Write short notes on:
  - a) Diagnosis of neonatal sepsis
  - b) Abdominal encerclage operation

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Approach to bleeding newborn.
- 2. Complications and management of Infant of diabetic mother.
- 3. Transport of sick newborn.
- 4. Etiology and evaluation of a newborn with seizure on day 1 of life.
- 5. Fetal procedures.
- 6. Diagnosis and management of Narcotizing entercolitis.
- 7. Approach to a child with Failure to thrive.
- 8. Assessment of growth from birth to 1 year of age.
- 9. Diagnosis and management of Autism.
- 10. Child labour.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the anaesthetic management and precautions during ENT LASER surgery.
- 2. Discuss the role anaesthesiologist in Tourniquet applications.
- 3. How do you design and set up an Intensive Care Unit (ICU) in a 500 bedded General hospital?
- 4. Mention the steps of defibrillation. Mention the differences between automatic external defibrillator and a conventional defibrillator.
- 5. Write the management acute pain in an opiod tolerant patients.
- 6. Describe two nonpharmacological methods for chronic pain management.
- 7. Discuss the advantages of Newer muscle relaxants in anaesthesia.
- 8. Write a note on awareness during anaesthesia and its medico legal implications.
- 9. Describe the prevention and management of complications of hypothermia under anaesthesia.
- 10. Discuss the role of Isoflurane in Cardiac anaesthesia.

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### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss pathology of cartilaginous tumors.
- 2. Discuss histological features of prognostic significance in Malignant melanoma.
- 3. Describe gastrointestinal stromal tumors (GIST).
- 4. Describe the mechanisms in progression of Glomerular diseases.
- 5. Discuss pathology of cholestasis.
- 6. Discuss pathology of emphysema.
- 7. Discuss pathology of hypertrophic cardiac myopathy.
- 8. Discuss etiopathogenesis and pathology of endometrial intraepithelial neoplasia.
- 9. Classify and discuss thyroid lesions with follicular architecture.
- 10. Discuss pathology of Meningioma.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anatomy of the functioning unit of the kidney and discuss the excretory urography as a test of renal function.
- 2. Describe the anatomy of the colon. List the congenital anomalies and discuss the radiological features of any one condition in detail.
- 3. Write short notes on:
  - a) Pancoast's Tumour
  - b) T-Tube Cholangiogram
- 4. Describe briefly the anatomy of the paranasal sinuses and their radiological investigations.
- 5. Describe radiological changes seen around the knee joint in cretinism, congenital syphilis and scurvy.
- 6. Write short notes on:
  - a) Sequestration of the lung
  - b) Fibrous Dysplasia
- 7. Write short notes on:
  - a) Stress fractures
  - b) Myxofibroma
- 8. Write short notes on:
  - a) Acromegaly
  - b) Hysterosalpingiogram
- 9. Describe the radiological and imagiological features of hyper parathyroidism.
- 10.Describe in detail the physical principles involved in taking a good diagnostic radiograph.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

### PULMONARY MEDEICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Caries spine.
- 2. Silico Tuberculosis.
- 3. Management of tuberculosis in chronic renal failure patient.
- 4. Treatment to tuberculous meningitis in a child.
- 5. MDR Tuberculosis
- 6. Revised tuberculous control programme.
- 7. Bronchopleural fistula.
- 8. Management of tuberculous pleural effusion.
- 9. Ocular tuberculosis
- 10. Tuberculo sarcoidosis.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Laboratory diagnosis of Weil's disease.
- 2. Urinary tract infections.
- 3. Scarlet fever.
- 4. Mycoplasma.
- 5. Weil Felix Test.
- 6. Pathogenicity of tetanus.
- 7. Nonsporing anaerobes.
- 8. Vibrio parahaemolyticus.
- 9. Vancomycin resistant Enterococci.
- $10. Pathogenicity\ is lands.$

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the parameters used for the measurement of TB problem in India.
- 2. Discuss the epidemiology, prevention and control strategy for faeco oral infections in India.
- 3. Discuss the health hazards of smoking. Add a note on legislative measures against smoking in India.
- 4. Discuss globalization and rapid industrialization in India and their relation in the problem of communicable and non-communicable diseases in India.
- 5. Discuss in detail about systemic errors in epidemiological studies.
- 6. Discuss screening and diagnostic tests. How will you screen and urban population for STD's.
- 7. Discuss the concept of control, prevention, eradication and elimination of disease in a community.
- 8. Discuss causal association and criteria for judging an association to be a "causal association". Give suitable examples.
- 9. Discuss the role of dietary fat in health and disease.
- 10.Discuss the investigation and planning control measures of an outbreak of jaundice in a community.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Give an account of development and classification of "Mood disorders".
- 2. "Psychological intervention" in obscessive compulsive disorder Discuss in detail.
- 3. Describe the aetiology and clinical features of human prion diseases.
- 4. Describe the neuropsychiatric aspects of HIV infection.
- 5. Write an essay on "Somatoform disorders". How to manage this condition?
- 6. Evaluate the current "Status of schizophrenia" and its aetiology, course management and outcome.
- 7. What are the subtypes of vascular dementia? Discuss its aetiology and management.
- 8. Describe the neuropsychiatric sequelae of head injury.
- 9. Discuss the neuropsychiatric manifestations of endocrine disorders.
- 10. What is role of neuropsychological assessment in patients with cerebral disease?

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Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe the role of Folic Acid in Nucleotide synthesis. Explain the mechanism of action of Antifolate drugs.

- 2. Describe the structure, synthesis and regulation of cholesterol. Describe the Biochemical importance of Lipid Profile.
- 3. How is Acetyl-CoA formed in the body? Mention its utilization in the intermediary metabolism.
- 4. Describe Embden-Meyerhoff pathway mentioning the energetics and factors influencing the pathway.
- 5. Describe the basis of Biochemical Tests done in a case of Myocardial Infarction and Muscular dystrophies.
- 6. Describe the Co-enzymes forms affecting Neurological system in our body and their functions and metabolism in the body.
- 7. Describe in detail oxidative and substrate level phosphorylation and suitable examples.
- 8. How are ketone bodies formed in the body? Describe the tests done to diagnose ketosis.
- 9. What is the importance of HbA<sub>1</sub>C? Describe the chemistry behind it. Give a short note on the laboratory errors in assessing Diabetic Control.
- 10. Describe the flow chart of oxidation of pyruvic acid to acetyl CoA. How it is important in intermediary metabolism.

### M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Atypical antidepressants.
- 2. Treatment of Alcohol Dependence.
- 3. Drugs causing Insomnia.
- 4. Selective COX-2 inhibitors.
- 5. Synthetic and semi synthetic atropine substitutes.
- 6. Drugs used in migraine.
- 7. Angiotensin receptor blockers.
- 8. Loop Diuretics.
- 9. Ketamine.
- 10. Vigabatrin.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the pathology of cerebral oedema and its complications.
- 2. Discuss the process of healing of septic lacerated wounds.
- 3. Precipitin test and its uses in Forensic Medicine.
- 4. Discuss the role of histopathology in solving medico legal problems.
- 5. Discuss the causes of death due to injuries.
- 6. Describe the entomology of cadaver.
- 7. Discuss the uses of microbiology in Forensic Medicine.
- 8. Various immunological methods used in Forensic Medicine.
- 9. How will you investigate the causes of food poisoning?
- 10. Discuss the causes of death due to burns.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

### SYSTEMIC PHYSIOLOGY

Paper-II : Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Haemostasis.
- 2. Rh incompatibility.
- 3. Lymphocytes in immunity.
- 4. Gastric emptying
- 5. Acidification of urine.
- 6. Tubuloglomerular feed back.
- 7. Growth hormone.
- 8. Functions of glucocorticoids.
- 9. Physiological basis of Tetany.
- 10. Maternal changes in pregnancy and its physiological basis.

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe clinical features and management of compound fracture femur.
- Describe the clinical feature and management of supracondylar fracture of humerus.
- 3. Discuss organ transplantation.
- 4. Mention errors and complication in surgery. Discuss pulmonary embolism.
- 5. Discuss the merits and demerits of laparoscopic surgery.
- 6. Discuss stemcell research and DNA cloning.
- 7. Discuss common benign disorders and disease of the breast.
- 8. Discuss the clinical features and management of carcinoma cheek.
- 9. Discuss the internal derangement of knee joint.
- 10.Discuss shock.

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 1. Management of compound fractures of tibia.
- 2. Epiphyseal injuries of distal end of radius.
- 3. Fracture neck of femur, its management in 60 year old female.
- 4. Management of non-union of long bone.
- 5. Myositis ossificans.
- 6. Gas Gangrene.
- 7. Dupytren's fracture.
- 8. Scaphoid non-Union.
- 9. Jone's fracture.
- 10. March fracture.

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### M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Ocular manifestations of Blunt injury closed globe.
- 2. How will you investigate a 50 year old female who comes with watering in one eye?
- 3. Enumerate differential diagnosis of infantile Esotropia. How will you evaluate a child of 5 years with the same?
- 4. Blepharitis.
- 5. Complication of Trabeculectomy.
- 6. Investigations for uveitis.
- 7. Management of uniocular congenital cataract.
- 8. Sturge Weber's syndrome.
- 9. Complications of soft contact Lens
- 10.a) Pannus
  - b) Sclerosing keratitis

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# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What are the premalignant conditions of the larynx and its management?
- 2. Describe the aetiology, signs, symptoms pathology and management of meniere's syndrome.
- 3. Describe the various cystic lesions in relation to nose and para nasal sinuses and its management.
- 4. Discuss the aetiology, pathogenesis and management of unilateral conductive deafness with intact tympanic membrane.
- 5. Discuss the aetiopathogenesis, clinical features, investigations and treatment of Juvenile Nasopharyngeal angiofibroma.
- 6. Describe in detail the aetiopathogenesis, clinical features and current therapy for Rhinoscleroma.
- 7. Discuss the causes, investigations and treatment for bilateral abductor paralysis of vocal cords.
- 8. Discuss the metastatic neck nodes in unknown primary.
- 9. Discuss Cavernous Sinus Thrombosis.
- 10. Write short notes on:
  - a) Hemifacial spasm
  - b) Osteomeatal complex
  - c) Caloric test

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### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Anatomy of oesophagus.
- 2. Deep cervical fascia and its modifications.
- 3. Co-coordinated movements and special functions of hand.
- 4. Ocular vascular tunic of eye ball.
- 5. Cervical lymph nodes.
- 6. Arch of aorta.
- 7. Formation and branches of sacral plexus.
- 8. Male urethra.
- 9. Hip joint.
- 10. Extra hepatic biliary apparatus.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

D.V.L.

### Paper-II

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Cutaneous manifestations of Hepatitis viruses infection.
- 2. Hailey Hailey disease.
- 3. Intravenous immunoglobulins in dermatology.
- 4. Recent advances in the management of epidermolysis bullosa.
- 5. Porokeratosis.
- 6. Surgical management of vitiligo.
- 7. Chemical leucoderma.
- 8. Tacrolimus.
- 9. Actinic reticuloid.
- 10. Dermatoses of pregnancy.

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### M.D. DEGREE EXAMINATION -OCTOBER/NOVEMBER, 2010

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Recent advances in management of Parkinson's Diseases.

- 2. Smoking cessation newer strategies.
- 3. Sub clinical hypothyroidism.
- 4. Pathological consequences of obesity.
- 5. Tension Pneumothorax.
- 6. Cardiac Tamponade.
- 7. Stem cell transplantation.
- 8. ANCA associated renal diseases.
- 9. Acute server asthma.
- 10. Current treatment of Rheumatoid arthritis.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OBSTETRICS & GYNAECOLOGY

Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the role of chemotherapy in gynaecological cancer.
- 2. Discuss the management of anovulatory infertility.
- 3. Discuss the diagnosis and management of genital tuberculosis.
- 4. Evaluate the conservative surgical techniques dysfunctional uterine bleeding.
- 5. Write short notes on:
  - a) Sacrospinous colpopexy
  - b) Remnant ovary syndrome
- 6. Diagnosis and management of polycystic ovarian syndrome in an adolescent.
- 7. Describe the treatment of stress urinary incontinence.
- 8. Discuss the principles and techniques of surgeries for nulliparous prolapse.
- 9. Describe the advantages and disadvantages of injectable contraceptives.
- 10. Write short notes on:
  - a) Emergency contraception
  - b) Female condom

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Omega 3 fatty acids and their role in infant nutrition.
- 2. Planning diet for a child with type I Diabetes Mellitus.
- 3. Current Recommendation in complementary feeding.
- 4. Recent drug formulations in the management of malaria.
- 5. Diagnostic evaluation of child suspected to have immune deficiency.
- 6. Grafts Vs Host disease.
- 7. Clinical features and management of congenital syphilis.
- 8. Management of Multidrug resistant tuberculosis.
- 9. Management of the baby delivered to an HIV positive mother.
- 10.Management of an infant born to a mother who developed chickenpox 2 days after delivery.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the anaesthetic management for Lefort-II fracture surgery.
- 2. Describe the various regional blocks for cataract surgery.
- 3. Outline the anaesthetic management for a case of upper arm fracture with chronical renal failure for open reduction with internal fixation.
- 4. Describe the anaesthetic management of an Acute Liver Failure (ALF) patient posted for an incidental surgery.
- 5. Write the anaesthetic management of Constrictive Pericarditis patient posted for pericardiactomy.
- 6. Anaesthetic management of a neonate posted for pyloromyotomy.
- 7. Discuss the post operative care of trans sternal thymectomy patient.
- 8. Write a note on glucocorticoid replacement therapy in anaesthesia.
- 9. Describe the anaesthetic management of bleeding retained placenta case after vaginal delivery.
- 10. Write a note on "Stress of Anaesthesia" in an anaesthesiologist.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss Hairy cell leukemia.
- 2. Discuss the FNAC of salivary gland tumors.
- 3. Discuss Lab diagnosis of Immune haemolytic anaemia.
- 4. Discuss synovial fluid analysis in Pathological conditions.
- Discuss pathophysiology and laboratory findings of anaemia in chronic diseases.
- 6. Discuss utility of cytospin in clinical Laboratory.
- Discuss pathophysiology and laboratory findings in essential thrombocythemia.
- 8. Discuss Blood substitutes.
- 9. Discus pathology of Hyperbilirubinemia.
- 10.Discuss 'D' Dimer test.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe briefly the anatomy of the spinal canal and discuss the diagnostic procedures and radiological findings in any one pathological conduction.
- 2. Discuss briefly the role of radiology in intussusceptions.
- 3. Write short notes on:
  - a. Neurosonography
  - b. Rectrocaval ureter
- 4. Discuss the role of ultrasound in midline pelvic masses.
- 5. Classify the tumours of the orbit and discuss the role of CT and MRI in malignant tumours of the orbit.
- 6. Write short notes on:
  - a) Radionecrosis
  - b) Superior vena cava compression syndrome
- 7. Write short notes on:
  - a. Rhabdomyosarcoma
  - b. Oligohydramnios
- 8. Write short notes on:
  - c) Infertility
  - d) Ectopia vesicae
- 9. Describe the role of radiology in diagnosis of haematuria.
- 10. Describe ultrasound features of anencephaly and holoprosencephaly.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Classification and management of respiratory failure.
- 2. Asbestosis.
- 3. Management of lung abscess.
- 4. Primary pulmonary hypertension.
- 5. Tropical Pulmonary Eosinophilia.
- 6. Near drowning.
- 7. Hypoventilation syndromes.
- 8. Management of post operative atelectasis.
- 9. Lung in systemic lupus erythematosis.
- 10. Solitary pulmonary nodule.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Kyasanur forest disease.
- 2. Slow viruses.
- 3. Herpes simplex I
- 4. SARS
- 5. Cryptococcosis.
- 6. Dimorphicfungi.
- 7. Culture of Giardia lamblia.
- 8. Trypanomastigote.
- 9. Strongyloides stercolaris.
- 10. Pneumocystis carini,

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the safe motherhood initiatives taken by the Government of India.
- 2. Discuss in detail the interventions for integrated management of childhood diseases.
- 3. Discuss the current work of international Labour Organisation (ILO) with reference to ergonomics. What is its impact on standard of living?
- 4. Discuss in brief the salient features of National Family Welfare Programme. What are the barriers in achieving a small family norm?
- 5. Discuss the role of National Environment Engineering Research Institution (NEERI) in changing health care scenario of rural India.
- 6. Discuss the "Kyoto Protocol" in the light of National Environment Policy and its implications in India.
- 7. Discuss the recent advances in contraceptive technology suggest measures to improve the acceptance of contraceptive methods by the eligible couples in India.
- 8. Discuss various determinants of maternal mortality in India and role of social obstetrics in improving maternal care.
- 9. Discuss in detail about "Baby friendly Hospital Initiative" and add a note on exclusive breast feeding.
- 10.Discuss occupational cancers with reference to their prevention and rehabilitation measures.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the clinical features of borderline personality disorder. Briefly write on the guidelines followed in the management of borderline personality disorder.
- 2. Discuss the course and outcome of schizophrenia with special reference to Indian studies.
- 3. Discuss the conceptualization and management of post traumatic stress disorder.
- 4. Discuss the management of treatment resistant schizophrenia.
- 5. What are "Biological markers"? Describe in detail with examples.
- 6. Discuss the psychological effects of cloning and critically evaluate the same.
- 7. Write an essay on recent developments in genetics in the understanding of "schizophrenia".
- 8. "Mental Health Act 1987". Discuss in detail.
- 9. Discuss the various conceptual issues involved in the diagnosis of schizoaffective disorder.
- 10. Discuss the new perspectives that have emerged in understanding the neurobiology of depressive disorder.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 BIOCHEMISTRY

### Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the Biochemical mechanism underlying protein malnutrition. Add a note on clinical features including tests done in diagnosing the same.
- 2. Describe the influence of Hormones on adipose tissue.
- 3. What oil you will suggest for cooking daily Why? Describe the chemistry, sources, metabolic and hormonal influence of any one of them.
- 4. Describe the mechanism of action of hormones acting through cyclic AMP mediated cascade.
- 5. Discuss the role of diet in the risk of atherosclerosis.
- 6. Name four abnormal constituents present in the urine what biochemical tests you will adopt to clinch your diagnosis.
- 7. Mention the common inborn errors met in phonylalanine and Tyrosine metabolism in the body. How are they formed? Write a note on their clinical aspects.
- 8. Describe the digestion and absorption of Carbohydrates. How is it regulated?
- 9. Describe Glucose tolerance test. Explain the various types of the curve with special reference to Diabetes Mellitus.
- 10.Describe the metabolism of alcohol.

### 154-NR M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Plasma Expanders.
- 2. Antimicrobial prophylaxis.
- 3. Protease inhibitors.
- 4. Role of Glucocorticoids in tuberculosis.
- 5. Treatment of multi drug resistant malaria.
- 6. Biological response modifiers.
- 7. Insulin analogues.
- 8. Bromocriptine.
- 9. Griseofulvin.
- 10. Drugs used in Gonorrhea.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 FORENSIC MEDICINE

### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the procedure of recording dying declaration and discuss its medicolegal importance.
- 2. Presumption of survivorship and its medicolegal importance.
- 3. Difference between wound of entry and exit of a bullet.
- 4. Artificial insemination and its medicolegal aspect.
- 5. How will you determine time since death at postmortem examination?
- 6. Acts of commission and acts of omission in relation to infanticide.
- 7. How will you determine age of an individual?
- 8. Difference between somatic death and molecular death indicating their medicolegal significance.
- 9. Objects and rules for conducting medicolegal autopsy.
- 10. Discuss Grievous injuries with medicolegal aspects.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Stretch reflex and inverse stretch reflex.
- 2. Regulation of posture.
- 3. Deviations from normal body temperature.
- 4. Action potential in cardiac tissues.
- 5. Regulation of cardiac output.
- 6. Cutaneous circulation.
- 7. Ventilation-perfusion ratio.
- 8. Chemical regulation of respiration.
- 9. Visual pathway.
- 10. Physiological basis of deafness.

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the clinical features and management of intracranial tumours.
- 2. Discuss the merits and the demerits of the commonly used anaesthetic drugs.
- 3. Classify tumours of the adrenal medulla. Describe the clinical features and management of phaechromocytoma.
- 4. Discuss tracheostomy and its complications.
- 5. Discuss clinical features and management of carcinoma stomach.
- 6. Describe the clinical feature and management of ruptured spleen.
- 7. Discuss intestinal obstruction.
- 8. Discuss the differential diagnosis of haemoturia and its management.
- 9. Describe the clinical feature and management of carcinoma of the rectum.
- 10.Discuss the aetiology, pathology and the clinical feature and management of benign enlargement of the prostrate.

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Perthe's diseases.
- 2. Describe Giant Cell Variants.
- 3. Chronic Osteomyelitis.
- 4. Scoliosis.
- 5. Pott's Paraplegia.
- 6. Loose Bodies.
- 7. Neuropathic joint of knee.
- 8. Barlow's disease.
- 9. Osgood Schattler's Disease.
- 10. Trigger Finger.

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# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of Blow out fracture.
- 2. Aetiology and management of intermittent proptosis.
- 3. Evaluation of ARMD.
- 4. Discuss the principles in the management of tractional retinal detachment.
- 5. Discuss in detail about NPCB.
- 6. Discuss in detail different types of Optic atrophy.
- 7. Management and screening of Retinopathy of prematurity.
- 8. Clinical features and management of carotico cavernous fistula.
- 9. Investigations in amblyopia.
- 10. a) One and a half syndrome
  - b) Perflurocarbons

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss aetiology, clinical features and management of ostosclerosis.
- Describe in detail the various types of 'FLAPS' used in head and neck surgery.
- 3. Discuss the aetiopathology, clinical features and management of Ethmoidal Polypi.
- 4. Discuss the biomaterials used in Tympanoplasty.
- 5. Chemotherapy of malignant conditions in head and neck malignancies.
- 6. Describe the aetiopathology, clinical features and management Laternal Venous Thrombosis.
- 7. Discuss aetiopathology of Subglotic Stenosis and describe the recent available management.
- 8. What are the causes of Hoarseness of voice and enumerate different phono surgery.
- 9. Describe the clinical manifestations in ENT, in the AIDS affected patients.
- 10. Write short notes on:
  - a) GERD
  - b) Cricopharyngeal Myotomy
  - c) Laser in otology

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Single gene disorders.
- 2. Fixatives.
- 3. Histology of cerebrum.
- 4. Gene mapping.
- 5. Chromosome banding.
- 6. Histology of small intestine.
- 7. Genetic finger printing.
- 8. Preparation of differentially stained brain slices.
- 9. Recombinant DNA Technology.
- 10. Histology of kidney.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Vaccines in leprosy.
- 2. Childhood leprosy.
- 3. Pathogenesis and management of type 2 lepra reactions.
- 4. Newer antileprosy drugs.
- 5. Structure of M leprae.
- 6. Post exposure prophylaxis for HIV.
- 7. Management of genital warts.
- 8. Current status of national leprosy eradication programme.
- 9. Syndromic management of genital ulcer disease.
- 10. Recurrent vulvo-vaginal candidiasis.

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## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Heat stroke.
- 2. Bioterrorism.
- 3. MDR Tuberculosis.
- 4. Leptospirosis.
- 5. Reactional states in Leprosy.
- 6. Antimalarial combinations.
- 7. Botulinum toxin Therapeutic uses.
- 8. Evidence based Medicine Principles.
- 9. Organophosphorus poisoning
- 10. Viral hemorrhagic fever.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. How will you evaluate and treat thrombocytopaenia in obstetrics?
- 2. Discuss the management of bronchial asthma in pregnancy.
- 3. How will you manage hypertensive crisis in pregnancy?
- 4. Discuss the current controversies in hormone replacement therapy (HRT).
- 5. How will you evaluate and treat jaundice in pregnancy?
- 6. Write short notes on:
  - a) Foetal origin of adult diseases
  - b) Role of aspirin in pregnancy
- 7. Discuss the diagnosis and management of peri partum cardiomyopathy.
- 8. Discuss the management of septic shock.
- 9. Management of pregnant woman with road traffic accident.
- 10. Write short notes on:
  - a) Peri mortem caesarean section
  - b) Prophylactic antibiotics in gynaecology

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PAEDIATRICS

## Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Diagnosis and management of Hemolytic uremic syndrome.
- 2. Classification of Epileptic seizures. Diagnosis and management of Infantile spasms.
- 3. Management of early complications of acute pyogenic meningitis.
- 4. Treatment guidelines for neurocysticercosis.
- 5. Diagnosis and management of Organo Phosphorus Poisoning.
- 6. Pulmonary second sound in various cardiac conditions.
- 7. Staging and treatment of Hodgkin's disease.
- 8. Evaluation and management of a child with refractory congestive cardiac failure.
- 9. GCSF and GMCSF in Paediatric diseases.
- 10.Clinical features and management of chronic renal failure in children.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anaesthetic management of a patient with Tetralogy of Fallots for a BLALOCK's Shunt Surgery.
- 2. What are the anaesthetic implications for a patient undergoing corrective surgery for a scoliosis in the perioperative period?
- 3. Write a note on preservation solution used during transplant surgery.
- 4. Describe in detail about cerebral protection.
- 5. Mention the anaesthetic factors decreases the uterine blood flow.
- 6. Discuss about Duty to provide safe anaesthesia by an anaesthesiologist.
- 7. Describe the postural drainage related to anaesthesia.
- 8. Write the caudal block in children.
- 9. Discuss in detail the anaesthetic management of an adult with myasthenia gravis posted for Thymectomy.
- 10. Write the anaesthetic management of a 5 years old child with foreign body in the bronchus posted for bronchoscopy.

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## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss DNA Ploidy analysis.
- 2. Discuss microwave tissue processing.
- 3. Discuss atypical mycobacterial infections.
- 4. Discuss utility of Digital Photography in Histopathology.
- 5. Discuss Asbestos related disorders.
- Discuss classification and diagnosis of cutaneous lymphoproliferative diseases.
- 7. Discuss prognostic markers of acute lymphoblastic Leukemia.
- 8. Discuss Hereditary Glomerular diseases.
- 9. Discuss immunity in Leprosy.
- 10. Discuss Platelet Antibodies.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the techniques of hysterosalphingiogram and discuss its merits and demerits.
- 2. Discuss how you will plan a 700 bedded hospital diagnostic imaging department of a post graduate teaching institute.
- 3. Write short notes on:
  - a) Adamantinoma
  - b) Sarcoidosis
- 4. Describe the technique of mammography and its value in differential diagnosis of benign versus malignant masses of the breast.
- 5. Describe the plan X ray findings in osteosarcoma, osteoclastoma and chondrosarcoma.
- 6. Write short notes on:
  - a) Transvaginal sonography
  - b) Battered baby syndrome
- 7. Write short notes on:
  - a) Bronchiectasis
  - b) Cardiac tumours
- 8. Write short notes on:
  - a) Hayaline membrane disease
  - b) Renogram
- 9. Discuss the role of Magnetic Resonance imaging in obstetrics.
- 10. Describe the CT and MRI features of pancreatic lesions.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of a patient with HIV and extra pulmonary tuberculosis under RNTCP.
- 2. Role of vaccines in respiratory diseases.
- 3. Recent advances in management of ARDS patients in ICU.
- 4. Lung function in a patient with Guillain Barre syndrome.
- 5. Occupational asthma.
- 6. Role of case detection in TB control.
- 7. Incidence of tuberculosis present world scenario.
- 8. Low molecular weight heparin.
- 9. Non invasive ventilation.
- 10. Virtual bronchoscopy.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Typing methods of bacteria.
- 2. Interleukines.
- 3. National malaria control programme.
- 4. Extended spectrum Beta lactamases.
- 5. Parasitic vaccines.
- 6. Water analysis.
- 7. Neutralisation Test.
- 8. Newer fluroquinolones.
- 9. HBV
- 10.Kala azar.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss public private partnership with case studies in the light of national population policy.
- 2. Discuss motivational factors and their applications for improving work efficiency in an Urban Health Centre.
- 3. Discuss the present health manpower issues in India and its impact on health care delivery.
- 4. Discuss the evaluation of quality of health care delivery.
- 5. Discuss monitoring and evaluation of National Health Programmes.
- 6. Discuss the role of network analysis in Community Medicine.
- 7. Discuss how will you institute a cost containment strategy in public sector?
- 8. Discuss briefly the objectives specific goals and strategies of National Health Policy of India.
- 9. Discuss the recommendations of Mudaliar Committee (1962).
- 10.Discuss in detail the different quantitative management techniques used in the field of health.

## M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the various approaches followed in family therapy.
- 2. Discuss the issues in the classification and the description of clinical syndromes in young people with mental retardation.
- 3. Describe neuropsychiatric complications of HIV infection and its management.
- 4. Write an essay on "Parkinson's Disease.
- 5. Write in detail about consultation liason psychiatry.
- 6. Discuss the etiology, pathology, clinical features and management of huntingtons chorea.
- 7. Discuss the role of a psychiatrist in prevention of mental disorders.
- 8. What is cognitive behaviour therapy? How is this different from psychoanalytically oriented therapies?
- 9. Classify conduct disorder. Discuss the aetiology and management of this disorder.
- 10.Discuss the various approaches available for the treatment of sexual dysfunctions.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What are the functions of Plasma Proteins? How will you biochemically investigate a case of Multiple Myeloma?
- 2. Describe the concept of and clinical importance of (a) clearance tests (b) Load Tests (c) Tolerance test.
- 3. Describe the advantages and disadvantages of adopting manual and modern analytical procedures in the Laboratory.
- 4. Mention the common Toxic substances present in food stuffs. How do they affect the body? Briefly mention their preventive measures.
- 5. Biochemical tests done in a case of hyperbilirubinemia.
- 6. Write short notes on: (1) McArdles disease (2) Hartnup's disease (3) Albinism.
- 7. Discuss the biochemistry of retrovirus with special reference to HIV.
- 8. Beta carotene is an important source of Vitamin 'A' for vegetarians. Justify the above statement. Discuss their functions and deficiency manifestations of Vitamin A.
- 9. Discuss the various metabolic disturbances that occur in prolonged starvation.
- 10.Describe the basic facts concerning neuromuscular transmission. Explain the biochemical abnormality diagnosis and recent advances in a case of myasthenia Gravis.

## M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Drugs used in Myasthenia Gravis.
- 2. Drug treatment of ulcerative colitis.
- 3. Drug therapy of Filariasis.
- 4. Management of post menopausal osteoporosis.
- 5. Pharmacotherapy of Gout.
- 6. Drugs used in GERD (Gastroesophageal reflux disease).
- 7. Drug therapy of anaphylactic shock.
- 8. Drug therapy of Psoriasis
- 9. Treatment of Hypertensive Crises.
- 10.Drug treatment of Neutropenia.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss formation and functions of Medical Council of India.
- 2. Define and discuss vicarious responsibility with examples.
- 3. What precautions should be taken by the doctors to protect themselves from the charges of professional negligence?
- 4. Discuss the modern classification and causes of mental illness.
- 5. Define and discuss Lucid Interval and its medicolegal aspect.
- 6. Discuss the causes and medicolegal aspect of feigned insanity.
- 7. Define and discuss drug dependence.
- 8. Poisons acting through enzyme system of the body.
- Discuss the treatment and medicolegal significance of acute cyanide poisoning.
- 10.Discuss the causes of negative report of chemical examiner in cases of death due to poisoning.

## M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

## SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

## All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Cushing syndrome.
- 2. Physiological basis of edema.
- 3. Lung function tests.
- 4. 'J' point and ST segment.
- 5. Renin-angiotensin system.
- 6. Acquired immunodeficiency syndrome.
- 7. Hyperbaric oxygen therapy.
- 8. PAH clearance.
- 9. Respiratory acidosis.
- 10. Coronary angiography.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 GENERAL SURGERY

Paper-IV : General Surgery, Operative Surgery including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss control of surgical bleeding.
- 2. Principles of antibiotic therapy.
- 3. Describe cholecystectomy and its complications.
- 4. Discuss the surgical procedures for Hydronephrosis.
- Describe the clinical feature of intussusception of childhood and its management.
- 6. Discuss the endogenous and exogenous mediators of systemic inflammatory response syndrome (SIRS).
- 7. Roll of genes and hormones and tamoxifen in breast cancer.
- 8. Describe the modern management of salivary calculi.
- 9. Describe the complications of varicose veins (LEG) and preoperative duplex imaging before varicose vein surgery.
- 10.Discuss mechanical bowl preparation Vs. Non-preparation before elective left sided colorectal surgery.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of infected interlocking nail.
- 2. Arthroscopy of shoulder joint.
- 3. Bone Scan in Orthopaedics.
- 4. Discuss the value of ultrasound in musculo-skeletal disorders.
- 5. Discuss about vascularised bone graft.
- 6. SACH (Solid Ankle Cushion Heal) foot.
- 7. PHILOS (Proximal Humeral Inter Locking System) Plate.
- Advantages of LCP (Locking Compression Plate) over DCP (Dynamic Compression Plate).
- 9. Role of antibiotic impregnated cement in Orthopaedics.
- 10.Tension band wiring. Principles and its application in patellar fracture.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Genetic counseling in Retinitis pigmentosa.
- 2. Bionics.
- 3. I.V.T.
- 4. Antimetabolites in Ophthalmology.
- 5. Amniotic membrane transplantation.
- 6. C.T. Scan in ophthalmology Merits and demerits.
- 7. (INTACS) Intra Stromal Corneal Ring.
- 8. Role of free radicals and antioxidants in Retina.
- 9. Phaco with Trab.
- 10. a) Accommodative IOL
  - b) SWAP

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## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the clinical features, investigations and management of a carotid body tumor.
- 2. Discuss the aetiopathology, clinical features and management of Pleomorphic Adenoma of Parotid gland.
- 3. Describe the aetiology, pathology and management of midline granuloma.
- 4. Describe the pathology clinical features and management of Glomus Jugulare Tumours.
- Define cholesteatoma. Discuss the clinical features, complications and management.
- 6. Discuss the various surgical approaches to the internal auditory meatus.
- 7. Discuss the malignant tumours of the Nasopharynx and its management.
- 8. Discuss the aetiopathology of Benign lesions of the glottis. Describe the different available treatment.
- 9. Discuss the aetiology, pathology and management of secretory otitis media in a 10 years old child.
- 10. Write short notes on:
  - a) Otoaccoustic Emission
    - b) Thyroid crisis
    - c) Bronchial Foreign body

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2010 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Derivatives of mandibular arch and first arch syndrome.
- 2. Nuclei, functional components and distribution of cranial nerves in brain stem.
- 3. Components, connections and effects of lesion of basal ganglia.
- 4. Factors influencing foetal growth and development.
- 5. Derivatives of endodermal cloaca and associated anomalies.
- 6. Cerebrospinal fluid.
- 7. Somatic motor pathways and effects of lesion.
- 8. Development of lung and associated anomalies.
- 9. Development of inferior vena cava and associated anomalies.
- 10.Commissures of brain.

## M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2010

D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Classification and diagnosis of xanthomatosis.
- 2. Approach to a patient with diffuse cutaneous pigmentation.
- 3. Telogen effluvium.
- 4. Cutaneous manifestations of renal disorders.
- 5. Dermatomyositis.
- 6. Diet and dermatology.
- 7. Acute generalized exanthermatic pustulosis.
- 8. Management of ageing face.
- 9. Principles and indications of Mohs micrographic surgery in dermatology.
- 10.Sarcoidosis.

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100-NR

M.D. DEGREE EXAMINATION – APRIL, 2011

GENERAL MEDICINE

## Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

## All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Pharmacological control of portal hypertension.
- 2. Bone marrow transplantation.
- 3. Nerve conduction velocity.
- 4. Anti tumor antibiotics.
- 5. Myelodysplastic syndrome.
- 6. Pulmonary function tests.
- 7. Micro-albuminuria.
- 8. Immunological tests in diagnosis of tuberculosis.
- 9. Limbic system.
- 10. Reno vascular hypertension.

## M.S. DEGREE EXAMINATION – APRIL, 2011

## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss the pharmacology of prostaglandins. What is the role of prostaglandins in obstetric practice?
- 2. Cervical intraepithelial neoplasia.
- 3. Physiology of micturition and its implications in development of stress urinary incontinence.
- 4. Importance of alpha-fetoproteins in obstetrics.
- 5. Discuss placental hormones.
- 6. Role of folic acid in pregnancy.
- 7. Aetiopathogenesis of pregnancy induced hypertension.
- 8. Describe the developmental anatomy of uterus and cervix. Mention the developmental anomalies of uterus.
- 9. Bacterial vaginosis.
- 10. Genetic counseling in obstetrics.

#### M.D. DEGREE EXAMINATION - APRIL, 2011

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Biochemical changes in Hypoxic ischemic encephalopathy. 10

2. Renal function tests and their interpretation. 5+5=10

3. Neural tube closure defects and its management. 6+4=10

- Fetal growth during 1<sup>st</sup> trimester and effect of maternal medication and infection during this period.
   5+5=10
- 5. Lab tests for a child suspected to have chronic hemolytic anemia.

10

- 6. Normal body fluids in Newborn, infant and children. 4+3+3=10
- 7. Lab tests for the diagnosis of malabsorption. 10
- 8. Development of arch of aorta and its tributaries. 10
- 9. Thyroid development and thyroid hormone synthesis. 4+6=10
- 10.Urea cycle and inborn errors of metabolism associated withurea cycle defect.4+6=10

## M.D. DEGREE EXAMINATION – APRIL, 2011 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Use of magnesium in anaesthesia and intensive care.
- 2. What is new in monitoring depth of anaesthesia?
- 3. Use and relevance of cardiac troponins in critical care.
- 4. Chloroform commissions.
- 5. Enumerate differences between paediatric and adult airway.
- 6. John Snow.
- 7. Functions of Kidney.
- 8. Nitric Oxide.
- 9. Statistical methods used in research.
- 10. Principles of pulse oximetry.

#### M.D. DEGREE EXAMINATION - APRIL, 2011

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe in detail mechanism of Apoptosis.
- 2. Describe the process of cellular aging.
- 3. Describe the recently recognized infectious agents.
- 4. Describe the pathogenesis of Cardiac Edema.
- 5. Describe fragile X syndrome.
- 6. Describe the neoplasms associated with H.I.V. infection.
- 7. Discuss pathology of Vitamin 'D' deficiency.
- 8. Discuss etiology and pathogenesis of systemic lupus erythematosus.
- 9. Discuss pathology of paraneoplastic syndromes.
- 10. Describe pathogenesis of thrombosis.

## M.D. DEGREE EXAMINATION – APRIL, 2011 RADIO DIAGNOSIS Paper-I – Basic Sciences

Max. Marks: 100

Note: Answer all questions

Time: 3 Hours

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anatomy of thyroid. Mention the imaging investigation available to evaluate the thyroid pathology.
- 2. Discuss the radiation protection in isotope department.
- 3. Write short notes on:
  - a) Pleural calcifications
  - b) Cardiomyopathy
  - c) Ultrasound appearances of fibroid
  - d) Asphyxiatins thoracic dysplasia
  - e) Constrictive Pericarditis.
- 4. Explain in detail basic principles of Digital Subtraction Angiography.
- 5. How esophagogram done? Mention their clinical applications.
- 6. Describe the radiological anatomy of vertebra.
- 7. Explain in detail conventional and modified intravenous urogram.
- 8. Write short notes on:
  - a) Technitium 99 m
  - b) Maximum permissible dose
  - c) Image intensifier
  - d) Electromagnetic radiation
  - e) Characteristic curve of an x-ray film
- 9. Mention difference between digital radiography and computed radiography.
- 10. Write briefly about gut rotation.

## M.D. DEGREE EXAMINATION – APRIL, 2011 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Airway mucus.
- 2. Atypical imaging signs of pneumothorax.
- 3. Dynamic hyperinflation.
- 4. Round Atelectasis.
- 5. Modified Allen test
- 6. Re-expansion pulmonary edema.
- 7. Biopsy of parietal pleura.
- 8. Development of diaphragm.
- 9. Bronchogenic cysts.
- 10. Bronchial circulation.

## M.D. DEGREE EXAMINATION – APRIL, 2011 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the bacterial fimbriae.
- 2. Give an account of  $\beta$  lactamases produced by bacteria and their clinical relevance.
- 3. Write an essay on immunoflurescence.
- 4. Describe in detail on bacterial growth curve.
- Describe the structure of bacterial cell wall and discuss the steps of cell wall synthesis.
- 6. Describe the structure and functions of IgM molecule.
- 7. Classify Interleukins. Describe their immune functions. Add a note on their therapeutic applications.
- 8. Give an account of antifungal agents.
- 9. Write an essay on monoclonal antibodies.
- 10. Give an account of identification of bacteria by biochemical methods.

## M.D. DEGREE EXAMINATION – APRIL, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Discuss in detail Human Development Index.

- 2. Discuss the role of social and cultural factors in health and disease.
- 3. Discuss the procedures adopted for "Operational Research" in health services.
- 4. Discuss acculturation in detail and add a note on social control mechanisms prevailing in our country.
- 5. Discuss "Lifestyle" as aetiology of diseases and suggest suitable preventive measures.
- 6. Discuss the various indicators of health employed to assess the health profile in a community.
- 7. Discuss the role of nutritional factors in health and disease of a rural community in light of Millennium Development Goals.
- 8. Discuss the epidemiological evidences that led to the hypothesis that smoking causes lung cancer. How this was tested? Describe one such study.
- 9. Discuss with case studies social differentiation and female foeticide in light of women's' empowerment.
- 10.Discuss the model of web causation of disease with reference coronary artery disease.

## M.D. DEGREE EXAMINATION – APRIL, 2011 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Defense mechanisms.
- 2. Piaget's Theory.
- 3. Genetics in psychiatry.
- 4. Neuronal Migration.
- 5. Pharmacogenetics.
- 6. Papez circuit.
- 7. Circadian Rhythm.
- 8. Projective testings.
- 9. FMRI.
- 10.General adaptational system.

## M.D. DEGREE EXAMINATION – APRIL, 2011 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe various types of electrophoresis. Write in detail any one of them including their clinical application.
- 2. Write merits and demerits of sampling methods in Biostatistics.
- 3. Explain 'blotting' techniques with suitable examples.
- 4. How are major food substances transported in the body?
- 5. How are different cellular Organelles isolated by differential centrifugation?
- 6. Write a note on solid and liquid scintillating counters. What are its clinical applications?
- 7. Describe Endoplasmic reticulum.
- 8. Describe the role of Bicarbonate buffer system in maintaining the acidbase balance.
- 9. Explain mean, median and standard deviation and their significance.
- 10. Bring out the structural and biological role of m-RNA and r-RNA.

## M.D. DEGREE EXAMINATION – APRIL, 2011

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Phase I cytochrome p45O biotransformation and drug-drug interactions.
- 2. Kinetics of drug elimination.
- 3. Screening of a new drug molecule for analgesic activity.
- 4. Non parametric tests.
- 5. Blood brain and blood CSF barrier.
- 6. Pre clinical screening of drug.
- 7. Polymerase chain reaction and applications.
- 8. In vitro methods of isolated smooth muscle preparation to assay potency of acetylcholine.
- 9. Therapeutic index.
- 10. Randomised controlled clinical trial.

#### M.D. DEGREE EXAMINATION – APRIL, 2011

#### FORENSIC MEDICINE

Paper-I : Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the methodology of treatment in case of cyanide poisoning.
- 2. Name the agents you have read in forensic medicine which act and affect neuro-muscular junction. Describe their mode of action.
- 3. Describe the role of pelvis in finding out sex.
- 4. Describe the patho-physiology of frost bite and trench foot as a result of exposure to cold.
- 5. Describe the importance of DNA finger printing.
- 6. Describe the morphology of teeth. Which tooth you feel is most important and why?
- 7. Can you take X-ray image of sutures of skull? Which alternative you suggest to find age of middle aged and old person?
- 8. Describe the causes of death according to Gordon's classification.
- 9. Describe the methodology to find out the racial variation in humans.
- 10. How far pupils help in diagnosing and treating a medicolegal case?

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Gating of ion channels.
- 2. Action potential and electrotonic potentials.
- 3. Refractory period.
- 4. JAK-STAT pathway.
- 5. Transcription and translation of gene.
- 6. Classification of nerve fibers.
- 7. Molecular basis of muscle contraction.
- 8. Calcium calmodulin system.
- 9. Muscle tone.
- 10. Sarcotubular system.

## M.D. DEGREE EXAMINATION – APRIL, 2011 RADIOTHERAPY

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks: 100\

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What is Immobilization in radiotherapy and explain the impact of stabilization devices on External beam setup reproducibility?
- 2. Explain radio sensitivity and radio curability.
- 3. MLC (multileaf collimator).
- 4. What are 4R"s of radiobiology and explain any one of them.
- 5. How will you assess the response of treatment in solid tumors?
- 6. What is does time and normal tissue effect and explain Isoeffect graph?
- 7. Beam modifiers in radiation therapy.
- 8. Tumor markers.
- 9. Explain the biology of metastases.
- 10. What is the role of organ preservation in cancer?

#### M.S. DEGREE EXAMINATION – APRIL, 2011 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Anatomy of Ureter.
- 2. Surgical Anatomy of stomach.
- 3. GFR.
- 4. Enterohepatic circulation.
- 5. Polymerase chain reaction.
- 6. Isoenzymes.
- 7. Entamoeba histolytica.
- 8. Cytokines.
- 9. Clostridium Welchii.
- 10. Local anaesthesia.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Brachial plexus and ERB's palsy.
- 11. Bone graft.
- 12. Anti tubercular drugs.
- 13. Rickets.
- 14. Magnetic resonance imaging.
- 15. Arches of the foot and flat foot.
- 16. Stenosing tenosynovitis.
- 17. Post-operative pain management.
- 18. Treatment of gout.
- 10. Biopsy techniques.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe anatomy and actions of superior oblique muscle.
- 2. Discuss use of antimetabolites in ocular surgeries.
- 3. Describe histopathology of Melanomas.
- 4. Describe principle of Applanation tonometry and factors affecting it.
- 5. Describe various methods of measuring corneal curvature.
- 6. Discuss Gonioscopy.
- 7. Maintenance of Corneal Transparency.
- 8. Pathogenesis of Rubiosis Iridis.
- 9. Specular Microscopy.
- 10. a) β blockers
  - b) Rose Bengal stain

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Intratemporal facial nerve course.
- 2. Surgical anatomy of posterior wall of middle ear.
- 3. Theories of hearing.
- 4. Aminoglycosides.
- 5. Anatomical variation in CT of PNS.
- 6. CSF circulation.
- 7. Cartilages in laryngeal frame.
- 8. Microbes in Otorrhoea.
- 9. Pathogenesis of otogenic brain abscess.
- 10.Immunoglobulin A.

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Surgical anatomy of pericardium and clinical importance.
- 2. Surgical anatomy of RECTUS SHEATH and its surgical importance.
- 3. Investing layer of the Neck and its surgical importance.
- 4. Surgical anatomy of RECTUM and its applied aspect.
- 5. Surgical anatomy and applied aspect of pituitary gland.
- 6. VENOUS PERFORATORS of the leg and applied aspect.
- 7. Surgical anatomy of SCROTUM and applied aspect.
- 8. Surgical anatomy of Intrinsic muscles of HAND and its applied aspect.
- 9. Surgical anatomy of ERB's POINT.
- 10. Surgical anatomy of FEMORAL CANAL and applied aspect.

#### D.V.L.

#### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Cutaneous Vasculature.
- 2. Mast Cells.
- 3. Atopy Patch Tests.
- 4. Constituents of Sebum.
- 5. Ultrastructure of Mycobacterium Leprae.
- 6. Molecular Diagnosis of Cutaneous Diseases.
- 7. Dermal Fillers.
- 8. Chalones.
- 9. Tachyphylaxis.
- 10. Desmogleins.

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101-NR

M.D. DEGREE EXAMINATION – APRIL, 2011

GENERAL MEDICINE

#### Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Targeted therapy in chronic Myeloid Leukemia.
- 2. Early detection of cancer.
- 3. Jaundice during pregnancy.
- 4. Acute HIV syndrome.
- 5. Classic fever of unknown origin.
- 6. Unstable Angina.
- 7. Drug treatment of chronic Hepatitis B.
- 8. Total parenteral nutrition.
- 9. Non invasive ventilation.
- 10. Physician assisted suicide.

#### M.S. DEGREE EXAMINATION – APRIL, 2011 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Treatment of severe anaemia in the third trimester of pregnancy.
- 2. Diagnosis and management of early unruptured ectopic pregnancy.
- 3. Management of type II anterior placenta praevia at 34 weeks of gestation.
- 4. Deep transverse arrest.
- 5. Active management of third stage of labor.
- 6. Neonatal jaundice causes and management.
- 7. Causes and diagnosis of recurrent pregnancy losses.
- 8. Screening for Down's syndrome.
- 9. Neonatal resuscitation.
- 10. Perinatal transmission of HIV.

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Approach to a new born with respiratory distress.
- 11. Differential diagnosis, management of a newborn with Icterus on day 1 of life.
- 12. Temperature regulation in Newborn and complication and management of hypothermia in newborn.
- 13. Clinical features of Meconium aspiration syndrome and recent guidelines in the management of Meconium stained amniotic fluid.
- 14. Complications and management of polycythemia in newborn.
- 15. Standard deviation and percentile.
- 16. Assessment of growth in pediatrics.
- 17. Causes and management of enuresis.
- 18. Impact of television in children.
- 10. Integrated management of neonatal and childhood illness (IMNCI) approach.

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Liver function tests.
- 2. Role of acupuncture in pain management.
- 3. Planning of operation theatres for renal transplantation.
- 4. Pre emptive analgesia.
- 5. Management of anaesthesia for thymectomy (with myasthenia gravis).
- 6. Pain relief during labour.
- 7. Laser surgery and airway problems.
- 8. Day care anaesthesia.
- 9. Role of anaesthesiologist in emergency and critical care.
- Internal jugular vein cannulation, approaches, indications and complications.

### M.D. DEGREE EXAMINATION – APRIL, 2011 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss pathology of myocarditis.
- 2. Discuss etiopathogenesis and pathology of emphysema.
- 3. Discuss pathology of paraganglioma.
- 4. Classify and discuss pathology of non epithelial tumors of stomach.
- 5. Discuss etiopathogenesis of different types of gall stones.
- 6. Discuss pathology of membrano proliferative glomerulonephritis (MPGN).
- 7. Discuss pathology of endometrial stromal tumor.
- 8. Discuss prognostic predictive factors in Carcinoma breast.
- 9. Discuss Hyalinizing Trabecular Tumor of Thyroid gland.
- 10. Discuss pathology of sinonasal tumors.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

1. Describe the radiological features of ulcerative colitis.

- 2. Discuss the differential diagnosis of benign lesions of kidney.
- 3. How will you investigate a patient with acute abdomen? Describe the imaging features.
- 4. Write short notes on:
  - a. Cystic Hygroma
  - b. Perineal ultrasound
  - c. CT Sinogram
  - d. Silhoutte sign
  - e. Ventricular septal defect.
- 5. Mention briefly about calcium scoring in MDCT.
- 6. What is MR angiogram? Mention its clinical application.
- 7. Briefly mention how sonohysterogram done? Mention the indications and contraindications.
- 8. Write short notes on:
  - a) Sonomammogram Benign versus malignant lesions.
  - b) Isotope findings in thyroid lesions.
  - c) Cledio cranial dysplasia.
  - d) Osgood-slatter's disease
  - e) Xanthogranulamatous pyelonephritis.
- 9. Briefly mention the imaging findings of anorectal anomalies.
- 10. Describe the radiological findings of renal artery stenosis.

#### PULMONARY MEDEICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Vascular complications of Pulmonary Tuberculosis.
- 2. Nosocomial Tuberculosis.
- 3. Monodrug resistant Tuberculosis.
- 4. Mantoux test.
- 5. Pleural Tuberculosis.
- 6. Luciferase reporter assay.
- 7. Cultivation of Mycobacterium tuberculosis.
- 8. Disseminated tuberculosis.
- 9. Monitoring antituberculous therapy.
- 10. Open negative syndrome.

## M.D. DEGREE EXAMINATION – APRIL, 2011 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the role of tissue culture.
- 2. Give an account of meningococci.
- 3. Write an essay on chlamydiae.
- 4. Describe the morphology, cultural characteristics and laboratory diagnosis of Salmonella.
- Give an account of common clinical syndromes caused by bacteria.Describe the lab diagnosis of one of them.
- 6. Describe the epidemiology and lab diagnosis of cholera.
- 7. Give an account of Actinomyces Israeli.
- 8. Write an essay on microbiology and classification of leprosy.
- 9. Write an essay on nonfermenting gram negative bacilli.
- 10. Write an essay on rickettsiae.

# M.D. DEGREE EXAMINATION – APRIL, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss in detail the various approaches and strategies implemented in the control of Malaria in India.
- 2. Discuss in detail the counseling process for HIV/AIDS prevention.
- 3. Discuss the WHO guidelines for drinking water quality with special reference to Millennium Development Goals and National Socio Demographic Goals.
- 4. Discuss the epidemiology, prevention and control of non-insulin dependent diabetes mellitus.
- 5. Discuss the various laboratory procedures commonly employed in the diagnosis of viral diseases, their utility and limitations.
- 6. Discuss blindness prevention programmes in the light of their past, present and future. Add a note on vision 2020.
- 7. Discuss the problem, prevention and management of nutritional anemia in our country.
- 8. Discuss the aims/objectives, uses, types, criteria and evaluation measures of screening tests.
- 9. Discuss the "Epidemiological transition" and its effect on health and disease profile in our country over next 25 years.
- 10. Discuss the magnitude of problem of cancer in India and World. Discuss risk factors and prevention and control strategy for cervical cancer.

# M.D. DEGREE EXAMINATION – APRIL, 2011 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Diffuse lewy body dementia.
- 2. Post normalization.
- 3. Organic psychosis.
- 4. Irritable bowel syndrome.
- 5. Delirium.
- 6. Parkinsonism.
- 7. Genetics of mental retardation.
- 8. Diabetes and mental health.
- 9. Insomnia.
- 10. Psychiatry and endocrine disorders.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the biochemical aspects, sources and clinical disorders associated with Vitamin 'D'.
- 2. Describe the chemistry metabolism and clinical manifestations of Triglycerides in the body.
- 3. Write the structure, functions and metabolic aspects of glycero phospholipids. Write briefly on Arachidonic Acid.
- 4. Describe the process of contraction of smooth muscles and its regulation.
- 5. Explain antioxidant defense mechanism in biological system.
- 6. What are Bile Pigments? How are they formed, transported and excreted. How will you test Bile Pigments in the Lab.?
- 7. 'TCA' cycle plays a key role in intermediary metabolism Explain.
- 8. What is transamination and oxidative deamination? Explain with suitable examples.
- 9. Illustrate the role of Zinc and magnesium ions in enzymatic reactions using suitable examples.
- 10. Describe the chemistry, biochemical role and clinical significance of HbA1c.

#### **PHARMACOLOGY**

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Summarise the applied pharmacology of sodium channel blockers.
- 11. Therapeutic uses with rationale of cholinergic agonists.
- 12. Drugs causing Insomnia.
- 13. Selective COX-2 inhibitors.
- 14. Synthetic and semi synthetic atropine substitutes.
- 15. Drugs used in migraine.
- 16. Angiotensin receptor blockers.
- 17. Loop Diuretics.
- 18. Ketamine.
- 10. Vigabatrin.

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the postmortem findings in death due to coma.
- 11. Describe the role played by bacteria in putrefaction.
- 12. Describe the factors which affect the rate of putrefaction.
- 13. Describe the pathology in burn.
- 14. Describe different types of classification of burn based on the Degrees.
- 15. Describe the patho-physiology of Heat cramps, Heat stroke and Heat collapse.
- 16. Describe various intracranial haemorrhages.
- 17. Describe the effect of abnormal foetal circulation mentioning various anomalies.
- 18. Differentiate concussion of brain from drunkenness.
- Describe the role of bacteriology of Forensic Medicine and Toxicology.

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Haemopoiesis.
- 11. Physiological basis of blood transfusion.
- 12. Platelets in haemostasis.
- 13. Electrophysiology of GI smooth muscle.
- 14. Regulation of HCL secretion.
- 15. Counter-current mechanism.
- 16. Micturition reflex and bladder dysfunctions.
- 17. Thyroid dysfunction.
- 18. Regulation of plasma calcium.
- 10. Menstrual cycle.

#### M.S. DEGREE EXAMINATION – APRIL, 2011 RADIOTHERAPY

Paper-II – Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Second primary malignant tumors.
- 2. Concomittant Chemoradiation.
- What are the malignant neoplasm associated with AIDS and explain Kaposis"s sarcoma.
- 4. Classify Pitutary tumors and management of Pituitary adenomas in children's.
- 5. Management of Optic glioma.
- 6. Classify PNS tumors and give management of locally advanced Ca Maxilla.
- 7. Management of undifferentiated Thyroid tumors.
- 8. Quality of life and management of Ca Esophagus.
- 9. Management of Ca Breast T2NOMO in Rural India.
- 10. Roles of palliative chemo in metastatic Ca Colon.

# M.S. DEGREE EXAMINATION – APRIL, 2011 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Define fracture. Write the types of fracture. Discuss in detail about Colle's Fracture.
- 2. Classify mesenchymal tumours. Write in detail about osteogenic sarcoma.
- 3. Write in detail about choledochal cyst.
- 4. Etiology, clinical features, diagnosis investigations and management including role of surgery in acute pancreatitis.
- 5. Write in detail about Ulcerative Colitis, including the role of surgery.
- 6. Write in detail about damage control surgery.
- 7. Write in detail about carcinoid tumour.
- 8. Write in detail about desmoid tumour.
- 9. Write about the etiology, clinical features and management of lymphedema.
- 10. Classify vascular tumours. Discuss in detail about Kaposi's sarcoma.

## M.S. DEGREE EXAMINATION – APRIL, 2011 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 10. Supra condylar fracture femur.
- 11. Calcaneum fractures.
- 12. Fracture lateral condyle of humerus.
- 13. Anterior dislocation shoulder.
- 14. Fracture pelvis.
- 15. Meniscal injuries.
- 16. Glaezzi's fracture dislocation.
- 17. Gas Gangrene.
- 18. Traumatic paraplegia.
- 10. Bennet's fracture dislocation.

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## M.S. DEGREE EXAMINATION – APRIL, 2011 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Aetiology and diagnosis of granulomatous uveitis.
- 2. Aetiology and management of paediatric cataract.
- 3. Aetiology and management of dry eye.
- 4. Differential diagnosis of peripheral ulcerative keratitis.
- 5. IOL formulae and their limitations.
- 6. Multifocal IOLs and their limitations.
- 7. Discuss entropion correction surgeries.
- 8. Describe evaluation of a LASIK case and complications of that surgery.
- 9. What are the causes of anterior segment ischaemia and its diagnosis?
- 10. a) Anterior Chamber angle anomalies.
  - b) Pachymetry.

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## M.S. DEGREE EXAMINATION – APRIL, 2011 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Clinical features, pathology and management of Carcinoma Maxilla.
- 2. Discuss surgical anatomy of CP angle and differential diagnosis of CP angle tumour.
- 3. Discuss LE Forte Type III fracture and its management.
- 4. Discuss neck dissection types, indications with procedure and complications.
- 5. Pathogenesis, clinical features and management of secretory otitis media.
- 6. Discuss ENT management in unconscious head injury patient.
- 7. Write facial nerve course and surgical management of facial nerve palsy following mastoidectomy surgery.
- 8. Define sleep apnoea syndrome and discuss its management.
- 9. Discuss prelingual deaf child management.
- Recent advances in tonsillectomy procedures and its complications.

### M.D. DEGREE EXAMINATION – APRIL, 2011 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Extra ocular muscles and actions.
- 11. Lymphatic drainage of upper limb.
- 12. Bony labyrinth.
- 13. Circle of WILLIS and distribution.
- 14. Coeliac ganglion and distribution.
- 15. Formation and branches of sacral plexus.
- 16. Arches of foot and its support.
- 17. Relations and Blood supply of suprarenal gland.
- 18. Portal vein and porta-caval anastomosis.
- 10. Sterno clavicular joint and movements.

#### D.V.L.

#### Paper-II

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of acne vulgaris in a 20 year old girl.
- 2. Sweet syndrome.
- 3. Non-cutaneous associations of Psoriasis.
- 4. Incontinentia pigmenti.
- 5. Excimer laser in Dermatology.
- 6. Chronic actinic dermatitis.
- 7. Gene therapy in dermatology.
- 8. Collodion baby.
- 9. Sunscreens and melanoma.
- 10. Pseudoxanthoma elasticum.

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Obstructive sleep apnoea syndrome.
- 2. Activated protein C in management of severe sepsis.
- 3. Apoptosis.
- 4. Management of Refractory epilepsy.
- 5. Drug eluting stents.
- 6. Gestational diabetes.
- 7. Anti phospholipid antibody syndrome.
- 8. Sudden cardiac death.
- 9. Immune Reconstitution syndrome.
- 10. Meta-analysis.

# M.D. DEGREE EXAMINATION – APRIL, 2011 OBSTETRICS & GYNAECOLOGY Paper-III – Gynaecology including Family Planning

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Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the risk factors for cancer cervix.
- 2. Tubal factors in infertility.
- 3. Management of carcinoma in situ in a 35 years old woman.
- 4. Role of laparoscopy in gynaecology.
- 5. Dysgerminoma.
- 6. Precocious puberty.
- 7. Newer hormonal contraceptives.
- 8. Diagnosis and surgical procedures for VVF.
- 9. Minilaparotomy and complications of sterilization operation.
- 10. Estrogen replacement therapy.

## M.D. DEGREE EXAMINATION – APRIL, 2011 PAEDIATRICS

## Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Amylase rich technology.
- 2. Nutritional management of critically ill child.
- Mechanism of action of intravenous immunoglobulin (IVIG) and indications for IVIG in Paediatric conditions.
- 4. Diagnostic approach to a child with Pyrexia of unknown origin.
- 5. Clinical features and management of Kawasaki disease.
- Recommendations for immunization of an immuno compromised infant and child.
- 7. Causes, clinical features and management of Febrile Neutropenia.
- 8. Multidrug resistant typhoid fever and its management.
- 9. Clinical features and management of leptospirosis.
- Epidemiology, clinical feature and treatment of chikungunya fever.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Write briefly about problems and anaesthesia management for Tracheo-Esophageal fistula repair. (Neonate of age 24 hours).
- 2. Treatment of amniotic fluid embolism.
- 3. Apgar score.
- 4. Management of anaesthesia for patient with eclampsia for caesarian.
- 5. Treatment of diabetic ketoacidosis.
- 6. Write briefly anaesthesia management for liver transplant.
- 7. Treatment of organophosphorous compound poisoning.
- 8. Anaesthesia considerations for patients with psychiatric disorders.
- 9. Patient controlled analgesia.
- 10. Postural drainage.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss Erythroleukemia.
- 2. Discuss the FNAC of malignant thyroid neoplasms.
- 3. Discuss Bombay blood group.
- 4. Discuss the lab diagnosis of Lymphoma using modern amenities.
- 5. Discuss glycosylated haemoglobin.
- 6. Discuss synovial fluid analysis.
- 7. Discuss lab diagnosis of Haemophilia.
- 8. Discuss interpretation of histograms in haematology cell counter reports.
- 9. Describe renal function tests.
- 10. Discuss refractory anaemia.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Explain in detail biliary interventions.

- 2. Describe the imaging features of disc lesions. Add a note on MR myelography.
- 3. How neurosonogram is done? Mention its clinical applications.
- 4. Write short notes on:
  - a. Secondaries in liver ultrasound appearance
  - b. CT difference between pleural effusion and ascites.
  - c. MR fistulogram.
  - d. CT appearance of glioma.
  - e. Superficial ultrasound
- 5. Describe the role of ultrasound in thorax (extra cardiac lesions).
- 6. Differential diagnosis of benign pancreatic lesions.
- 7. Write short notes on:
  - a. Congenital lesions of kidney.
  - b. Pheochromocytoma.
  - c. Intussusception
  - d. Actinomycosis of lung
  - e. Tracheoesophageal fistula.
- 8. Discuss in detail tuberculous abdomen.
- 9. Differential diagnosis of colonic lesions.
- 10. How will you investigate male infertility? Mention the imaging features.

## M.D. DEGREE EXAMINATION – APRIL, 2011 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Chronic Thromboembolic Pulmonary Hypertension.
- 2. Superior sulcus tumor.
- 3. Pulmonary Nocardiosis.
- 4. Complications of Chronic Obstructive Pulmonary Disease.
- 5. Airconditioner lung.
- 6. Acute interstitial pneumonia.
- 7. Corticosteriod resistant asthma.
- 8. Tension pneumothorax.
- 9. Pulmonary alveolar microlithiasis.
- 10. Recurrent pneumonia.

# M.D. DEGREE EXAMINATION – APRIL, 2011 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Give an account of Mycetoma.
- 2. Describe the life cycle and lab diagnosis of Wuchereria bancrofti.
- 3. Give an account of current concepts in HIV pathogenesis.
- 4. List the intestinal nemotodes. Describe the life cycle and lab diagnosis of one of them.
- 5. Write an essay on opportunistic mycosis.
- 6. Give an account of Flavi viruses.
- 7. Give an account of Giardiasis.
- 8. Mention Trypanosomes of human importance. Describe the life cycle and lab diagnosis of one of them.
- 9. Give an account of Cryptosporidium.
- 10. Give an account of paramyxoviruses of human importance.

### M.D. DEGREE EXAMINATION – APRIL, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss a plan to assess noise pollution and its effect on workers in a factory. Suggest remedial measures.
- 2. Discuss the role of legislation in preventing occupational diseases.
- 3. Discuss the social security measures that are available to the working population in India.
- 4. Discuss in detail the national population policy demographic cycle in light of National Socio Demographic goals.
- 5. Discuss the strategies under RCH programme. Critically comment on its merits and demerits. Add a note on RCH II.
- Discuss growth monitoring with special reference to organizing, conducting and evaluating a growth monitoring programme in a rural community.
- 7. Discuss the role of voluntary organizations in environmental sanitation.
- 8. Discuss high risk pregnancy and its prevention national programme.
- Discuss the relation between environment and health. Describe the health effects of hospital waste. Outline the measures for disposal of hospital waste with 500 beds.
- 10. Discuss the job descriptions of the health assistants (male).

#### M.D. DEGREE EXAMINATION – APRIL, 2011 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Transcranial magnetic stimulation.
- 2. Methyl phenidate.
- 3. Generalized anxiety disorder.
- 4. Premature ejaculation.
- 5. Atypical antipsychotics.
- 6. Classification of mood disorders.
- 7. Crisis intervention.
- 8. Liaison psychiatry.
- 9. National mental health programmme.
- 10. Verenicline.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 BIOCHEMISTRY

#### Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What do you prefer: Vegetarian, Non-vegetarian or both in the diet? Give reasons. Describe the role of Riboflavin in nutrition.
- 2. What is a Fractional test meal? How will you diagnose various pathological conditions with the help of FTM report?
- Name the polysaccharides present in the diet. Give the stages of digestion and absorption. Mention briefly on any four pathological manifestations.
- 4. Describe one-carbon metabolism.
- 5. Write briefly on:
  - a) Lip tropic factors
  - b) Alkaline phosphatase
  - c) Importance of uric acid estimation in blood.
- 6. Respiratory Quotient (RQ). Mention the factors affecting RQ. Including clinical aspects.
- 7. Write briefly on:
  - a) Rancidity
  - b) Renal function Tests
  - c) Gilberts disease
- 8. Explain the steps involved in the degradation of cholesterol. Write a note on Hypercholesterolemia.
- 9. How is alanine converted to Glucose in the body? Indicate the importance of gluconeogenesis.
- 10. Describe the formation and fate of Acetyl CoA.

#### 154-NR M.S. DEGREE EXAMINATION – APRIL, 2011 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. PPAR & agonists.
- 11. Estrogen synthesis inhibitors.
- 12. Streptogramins.
- 13. Direct thrombin inhibitors.
- 14.β Lactamase inhibitors.
- 15. Bevacizumab.
- 16. Rescue factor.
- 17. ABVD regimen.
- 18. Goserelin.
- 10. Oseltamivir.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe sex chromatins in relation to its role in identification.
- 2. Discuss the role of a doctor to perform amputation of a limb. In the absence of the consent, how far he is fit for unfit to perform an amputation?
- 3. What is the basis of classifying burn and discuss all four types of classifications of burn.
- 4. Considering I.P.Cs and C.R.P.C.s, do you suggest any reform? If so why?
- 5. Describe in short violent and slow asphyxial deaths.
- 6. Describe the medical and medicolegal classifications of injuries (HURT).
- 7. Do comparative study of still-birth and precipitate labour.
- 8. Describe the changes which take place in the female body as a result of child birth which are medicolegally important.
- 9. How do you differentiate dry starvation from wet starvation? Discuss the postmortem findings in death due to starvation.
- 10. How moisture and temperature play the role to cause putrefaction, adipocere and mummification in a dead body?

#### M.D. DEGREE EXAMINATION – APRIL, 2011 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Properties of synapses.
- 11. Basal ganglia dysfunction.
- 12. Functions of limbic system.
- 13. Cardiac cycle.
- 14. Principles of haemodynamics.
- 15. Regulation of blood pressure.
- 16. Functional residual volume.
- 17. Mechanism of phototransduction.
- 18. On-center and off-center ganglion cells.
- 10. Mechanism of hearing.

# M.S. DEGREE EXAMINATION – APRIL, 2011 RADIOTHERAPY

Paper-III: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Premalignant lesions of skin and Sequelae of skin irradiation.
- 2. Sign, symptoms and diagnostic characteristics of intracranial tumors and management of Craniopharyngioma.
- Lymphatic drainage in Nasopharynx and Role of Brachytherapy in Ca Nasopharynx.
- 4. Chemo-irradiation in Ca Anal canal.
- 5. Management of metastatic Symptomatic Ca Prostate.
- 6. Management of stage I Uterine Cervix in a 35 years female.
- 7. Radiotherapy in Cutaneous T-cell lymphomas.
- 8. Management of Craniopharyngioma.
- 9. RT and Benign tumors.
- Classify tumors of Testis and write management of localized seminoma.

# M.S. DEGREE EXAMINATION – APRIL, 2011 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss in detail about etiology, clinical features, pathophysiology and management of intestinal obstruction.
- 2. Discuss Zollinger Ellison syndrome.
- 3. Define colostomy, types of colostomy indications and complications.
- 4. Write the types, clinical features and management of anorectal anomalies.
- 5. Classify thyroid tumours. Write about medullary carcinoma thyroid.
- 6. Describe the management of secondary node in the neck with unknown primary.
- 7. Discuss about the causes of increased intracranial tension and write about meningioma.
- 8. Describe the clinical features and management of iliac vessel occlusion.
- 9. Classify soft tissue sarcoma, write in detail about synovial cell sarcoma.
- 10. Causes of haematuria and their management.

# M.S. DEGREE EXAMINATION – APRIL, 2011 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Slipped upper capital femoral epiphysis.
- 2. Role of surgery in leprosy hand.
- 3. Osteo sarcoma.
- 4. Infantile septic arthritis.
- 5. Radiological findings in scoliosis.
- 6. Recurrent dislocation shoulder.
- 7. Surgical management of TB spine.
- 8. Hallux valgus.
- 9. Avascular necrosis of head of femur.
- 10. Arthrogryposis multiplexa congenital.

# M.S. DEGREE EXAMINATION – APRIL, 2011 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Clinical features and management of blow out fracture.
- 2. Causes of tractional Retinal Detachment and its management.
- 3. Investigations and management of Abducent Nerve Palsy.
- 4. Vitamin 'A' deficiency and its prophylaxis.
- 5. Pathogenesis of Age Related Macular Degeneration.
- 6. Surgical Modalities in congenital glaucomas.
- 7. Aetiology of secondary glaucomas.
- 8. Peripheral Retinal Degenerations.
- 9. Clinical presentation of a case of Glioma of optic nerve.
- 10. a) SF 6
  - b) Argyl Robertson's Pupil

#### M.D. DEGREE EXAMINATION – APRIL, 2011 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss pre and post operative complications and its management in modified radical mastoidectomy.
- 2. Write an essay on atrophic rhinitis.
- 3. Discuss surgical anatomy of submandibular salivary gland and indication, procedure of its excision.
- 4. Discuss congenital anomalies of soft tissue structures of neck and its management.
- 5. Discuss the management of unilateral proptosis by an ENT surgeon.
- 6. Discuss management of a 40 years old lady with giddiness of 6 months duration.
- 7. Discuss management of a patient with fever and Griesinger's sign positive.
- 8. Discuss the role of ENT surgeon in pituitary tumour management.
- 9. Write in detail secondary neck and head and neck malignancies.
- 10. Discuss the role of laser in ENT diseases management.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Structural chromosomal abnormalities.
- 2. Histology of placenta.
- 3. Clearing agents.
- 4. Embalming techniques.
- 5. Karyotype in Klinefelter's syndrome.
- 6. D.N.A. probe and its application.
- 7. Histology of Fallopian tube.
- 8. Histology of prostate.
- 9. Functional changes in the epithelium of Gastro intestinal tract.
- 10. Histology of thin skin.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Oral hairy leucoplakia.
- 11. Kaposis sarcoma.
- 12. Condyloma acuminata.
- 13. Malignant syphilis.
- 14. Esthiomene.
- 15. Immunotherapy in Leprosy.
- 16. Dapsone hypersensitivity.
- 17. Lucio phenomenon.
- 18. Leprosy eliminated comment.
- 10. Reversal reactions in Leprosy.

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#### M.D. DEGREE EXAMINATION – APRIL, 2011 GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Acute poisoning principles of management.
- 2. Dengue hemorrhagic fever / shock syndrome.
- 3. MDR Tuberculosis.
- 4. Complications of salmonellosis.
- 5. Modified WHO recommended Multi drug therapy regimens in Leprosy.
- 6. Post exposure prophylaxis of Rabies.
- 7. Neuro cysticercosis.
- 8. Lathyrism.
- 9. Prophylaxis of viral hepatitis.
- 10. Envenomation by poisonous snake.

#### M.S. DEGREE EXAMINATION – APRIL, 2011

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Oxytocics in obstetrics.
- 2. Effect of drugs on fetus.
- 3. Cervical encerclage operation.
- 4. Ovulation induction drugs.
- Clinical manifestations, diagnosis and medical management of hyperproplactinemia.
- 6. Discuss the management of Rh negative mother in Zone II at 32 weeks of gestation.
- 7. Insulin usage in gestational diabetes.
- 8. Hysteroscopy.
- 9. Radical vulvectomy indications and procedure.
- 10. Surgical procedures for pain relief in endometriosis.

### M.D. DEGREE EXAMINATION – APRIL, 2011 PAEDIATRICS

#### Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of associated conditions in cerebral palsy.
- 2. Chemotherapy of Acute Lymphoid Leukemia.
- 3. Clinical approach to the diagnosis of a child with chronic polyarthritis.
- 4. Diagnosis and management of Steven Johnson syndrome.
- 5. Management of snakebite.
- Clinical features, diagnosis and management of Total Anamolous Pulmonary Venous Drainage.
- 7. Acute inflammatory upper airway obstruction.
- 8. Complications of Sickle cell anemia.
- Etiology, diagnosis and management of disseminated intravascular coagulation.
- 10. Types of Renal Tubular acidosis and their management.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Anaesthesia management for a patient with severe anaemia coming for caesarian.
- 2. Diagnosis and treatment of delayed recovery in a patient from general anaesthesia.
- 3. Anaesthesia for cardioversion.
- Geriatric patient with bronchial asthma for lower limb surgery preparation and anaesthesia management.
- 5. Effects of Tourniquet.
- 6. Different types of consent and importance.
- 7. Write briefly anaesthesia management for patient for lobectomy.
- 8. Air embolism Causes and treatment.
- 9. Management of accidental intra arterial injection of thiopentothal sodium.
- 10. Severe anaphylaxis in emergency room management.

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# M.D. DEGREE EXAMINATION – APRIL, 2011 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss Nonalcoholic fatty liver disease (NASH).
- 2. Discuss Human Papilloma virus infection and its association with carcinoma cervix.
- 3. Discuss error trapping and error avoidance in histopathology.
- 4. Discuss molecular genetic changes in Prostate Carcinoma.
- 5. Discuss Primary Amyloidosis.
- 6. Discuss vascular neoplasms of Intermediate low risk types.
- 7. Discuss investigations in obesity.
- 8. Discuss pathology of osteoporosis.
- 9. Discuss Tuberous Sclerosis.
- 10. Discuss Genomics of Trophoblastic Tumors.

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#### M.D. DEGREE EXAMINATION – APRIL, 2011 RADIO DIAGNOSIS

### Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write briefly about the newer MR applications in breast disease.
- 2. Describe CT and MRI features of Meningioma.
- 3. Discuss the role of interventional radiologist in stroke.
- 4. Write short notes on:
  - a) Tensor imaging
  - b) Torsion testis
  - c) Breast calcifications
  - d) Baker's cyst
  - e) Ultrasound of tendoachiles
- 5. Describe the radiological features of multiple myeloma.
- 6. Write briefly about image guided renal biopsy.
- 7. Discuss the role of imaging in renal tumors.
- 8. Write short notes on:
  - a) Agenesis of corpus collosum
  - b) Doppler findings in AV fistula
  - c) MR findings in coarctation of aorta
  - d) Haemangioma of vertebra
  - e) Osteoid osteoma
- 9. Describe the role of MRI in chest diseases (excluding heart).
- 10. Describe the MRI features of liver lesions.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Inferior venacava filters.
- 2. World Tuberculosis day.
- 3. Preventive aspects of Chronic Obstructive Pulmonary Disease.
- 4. Management of obstructive sleep apnoea.
- 5. Pneumocystis carinii pneumonia.
- 6. Neardrowning.
- 7. Virtual Bronchoscopy.
- 8. Information, Education and Communication in 'Tuberculosis control'.
- 9. DOTS (Directly Observed Treatment Short course) Plus.
- 10. Immunotherapy for tuberculosis.

#### M.D. DEGREE EXAMINATION – APRIL, 2011

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the lab diagnosis of suspected TB meningitis.
- 2. Write an essay on recent advances in microbial vaccine development.
- 3. Discuss the role of tissue culture in virology.
- 4. Give an account of safe waste management for a 500 bedded hospital.
- 5. Write an essay on principle and applications of polymerase chain reaction.
- 6. Give an account of quantitative cultures in clinical microbiology.
- 7. Give an account of organization of quality control program for a Clinical Microbiology Laboratory.
- 8. Write an essay on automation in clinical microbiology. What is Laboratory information system?
- 9. Give an account of immunotherapy of cancer.
- 10. Describe the taxonomy of bacteria and its relevance.

### M.D. DEGREE EXAMINATION – APRIL, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss healthcare delivery system in the light of globalization and add a note on role of hospitals and NGO's in health care delivery.
- 2. Discuss health information system in India with special reference to application of information systems to public health.
- 3. Discuss programme evaluation and review technique and critical path method with reference to PERT as a management technique.
- 4. Discuss how would you develop, organize and evaluate a health education programme to reduce mortality and morbidity due to diarrhoeal diseases in a community.
- 5. Discuss the healthcare administration at district level and below. Highlight the role of inter sectoral coordination for effective healthcare administration.
- 6. Discuss evaluation with reference to evaluating national immunization programme.
- 7. Discuss in detail the health planning in India in successive five year plans.
- 8. Discuss the role of various Human Resource Management techniques in health care of a rural population.
- 9. Discuss the role of medical colleges in social systems in light of National Health Policy of India.
- Discuss the role of "Health Systems Research" in healthcare industry.

#### M.D. DEGREE EXAMINATION – APRIL, 2011

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Child sexual abuse.
- 2. Management of terminally ill.
- 3. Stigma.
- 4. Psychiatrist in court.
- 5. CBT.
- 6. Nicotine dependence.
- 7. Psychotropics and sexual dysfunction.
- 8. Sleep disorders.
- 9. Autism.
- 10. 'Schizophrenia is preventable' Evaluate.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe Frederickson's classification of Hyperlipoproteinemia.
- 2. Describe the role of platelets in coagulation. What are the clinical aspects in estimating prothrombine time?
- 3. Investigation of Renal calculi in the Lab.
- 4. What is meant by clearance tests? Explain the types. How are they conducted? Interpet the results.
- 5. Describe the synthesis of Bilirubin. How will you investigate a case of Hemolytic Jaundice in the Lab?
- 6. What are the common major Electrolytes in the body? How are sodium and potassium regulated with special reference to renal reabsorption?
- 7. Write briefly on:
  - a. Von-Gierke's Disease
  - b. Alcaptonuria
  - c. Biotin
  - d. Xanthinuria
- 8. What is accuracy, precision, specificity, sensitivity and percentage error while performing tests in the Laboratory?
- 9. Write briefly on reducing substances in urine and biochemical tests done with special reference to sugars.
- Describe the formation of carbon dioxide and its distribution in the body. Describe the effects of carbon dioxide on blood pH.

#### M.D. DEGREE EXAMINATION – APRIL, 2011

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Drug eluting stents.
- 2. Arsenic tri oxide.
- 3. Drug therapy of chloroquine resistant plasmodium falciparum.
- 4. Health benefits of oral contraceptives.
- 5. Prophylaxis of HPA suppression and long term glucocorticoid therapy.
- 6. Hematopoietic growth factors.
- 7. Pharmacological role of 'spindle poisons'.
- 8. Rational and management of methylalcohol poisoning.
- 9. HAART regimen.
- Treatment of Wuchereria bancrofti and Brugia malayai infections.

### M.D. DEGREE EXAMINATION – APRIL, 2011 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe Consumer's Protection Act. How far it is applicable in medical profession?
- 2. Describe various rules which deal with criminal responsibility of an insane. According to you, which rule is most suitable and why?
- 3. Name poisons which cause industrial hazards. Write the clinical features, treatment and prevention of these hazards.
- 4. Name clinical features of chronic ethyl alcohol poisoning. Define abstinence syndrome. What are the characteristic withdrawal features in a drug addict?
- 5. Trace the history of organophosphorus compounds. Describe their pharmacological action. Suggest measures to prevent its toxicity.
- 6. Write an essay on drug dependence.
- 7. Classify sexual offence without using terms like natural, unnatural.

  Discuss the psychology behind sexual perversions.
- 8. Discuss differential diagnosis of opium poisoning.
- 9. Differentiate clearly the role played by Medical Council of India and State Medical Council.
- 10. Differentiate neurosis and psychosis with examples. Consider obsession in relation to these two.

#### M.D. DEGREE EXAMINATION – APRIL, 2011

#### SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Cystometrogram.
- 2. Autonomic function tests.
- 3. Physiological basis of oral rehydration fluid.
- 4. Hyaline membrane disease.
- 5. Jugular venous pulse.
- 6. Haemophilia.
- 7. Electromyography.
- 8. Pathophysiology of heart failure.
- 9. Cardiac vector analysis.
- 10. Sleep disorders.

#### M.S. DEGREE EXAMINATION – APRIL, 2011 RADIOTHERAPY

Paper-IV: Clinical subjects in relation to Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Short note on photodynamic therapy.
- 2. Cancer prevention.
- 3. Quality assurance in radiation oncology. Explain QA in EBRT.
- 4. What are the Ethical Considerations in RT and Legal principles concerning the malpractice in radiation oncology?
- 5. Cost benefit and EBM (Evidence based medicine).
- 6. Rationale of Accelerated fractionation.
- 7. Neutron beam.
- 8. Angiogenesis and RT.
- 9. Total skin radiation.
- 10. Types of IMRT and inverse planning.

#### M.S. DEGREE EXAMINATION – APRIL, 2011 GENERAL SURGERY

Paper-IV : General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Recent advances in malignant melanoma. Discuss the management.
- 2. Non invasive carcinoma of the breast.
- 3. Write in detail about the Hurthle cell tumour.
- 4. Write in detail about obturator hernia.
- 5. Discuss in detail about tumour markers.
- Discuss about etiology, classification and clinical features of renal stones.
   Write about extracorporeal shock wave lithotripsy.
- 7. Write about the principles, types and application of MRI.
- 8. Benign lesions of oral cavity and management of Ranula.
- Clinical features and management of peritonitis. Write about gram negative Septicaemia.
- 10. Etiology of bedsore, management of bedsore.

### M.S. DEGREE EXAMINATION – APRIL, 2011 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Titanium nail.
- 2. Calcium hydroxyl appatite.
- 3. Neo-osteogenesis.
- 4. Surface replacement.
- 5. Endoscopic discectomy.
- 6. Navigation surgeries.
- 7. Harrington rod instrumentation.
- 8. Locking compression plate.
- 9. Skeletal manifestations of AIDS.
- 10. Ligamento taxis.

#### M.S. DEGREE EXAMINATION – APRIL, 2011 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Intrastromal Ring (Kera ring) implantation.
- 2. Conductive keratoplasty.
- 3. Anti VEGF therapy.
- 4. Trans canalicular laser D.C.R.
- 5. Stem cell transplantation.
- 6. Pentacam application as a diagnostic tool.
- 7. OCT in nerve fibre layer evaluation.
- 8. Toric contact lenses.
- 9. Recent management modalities of Diabetic Macular Oedema.
- 10. a) Aspheric intraocular lenses.
  - b) C.M.V. Retinitis.

#### 183-NR M.S. DEGREE EXAMINATION – APRIL, 2011 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Thyroplasty-evoluation, indications, types and complications.
- 2. Discuss fistula following laryngectomy and its management.
- Describe clinical features, management and complications of vestibular schwannoma.
- 4. Discuss left vocal cord palsy and its management.
- Discuss pathogenesis, clinical features and management of otogenic brain abscess.
- 6. Discuss chemotherapy in head and neck cancer.
- 7. Discuss oetiopathology, clinical features and management of sino- nasal polyposis.
- 8. Clinical features and management of lingual thyroid.
- 9. Discuss the management of mild, moderate and severe epistaxis.
- 10. Discuss in detail the ossiculoplasty in ear disease.

#### M.D. DEGREE EXAMINATION – APRIL, 2011 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- **1.** Development of palate and anomalies.
- **2.** Development of Diaphragm and Anomalies.
- **3.** Procedure for assessing fetal status.
- 4. Development of Somite and Fate.
- **5.** Nuclei and Functional components of cranial nerves.
- **6.** Internal structure and connections of cerebellum.
- 7. Fate of pharyngeal pouches.
- 8. Development of lung and Histogenesis.
- **9.** Development of spinal cord and anomalies.
- **10.** Cervical sympathetic ganglions and connections.

#### M.D. DEGREE EXAMINATION - APRIL, 2011

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Lupus nephritis.
- 2. Basal cell epithelioma.
- 3. Dermatogenic enteropathy.
- 4. Tacrolimus in Dermatology.
- 5. Plasmapheresis.
- 6. Lupus pernio.
- 7. Mycetoma.
- 8. Gunther's disease.
- 9. Pyoderma gangrenosum.
- 10. Oculo cutaneous albinism.

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100-NR

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011

GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

#### All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Coronary arteries distribution and supply.
- 2. Atherosclerosis.
- 3. Describe the Physiological changes in the body at high altitudes and the acclimatization that takes place.
- 4. Importance of Anion Gap.
- 5. Auto-antibodies.
- 6. Interferons.
- 7. Newer drugs used as neuroprotective therapy in Parkinsonism.
- 8. Genetic counseling.
- 9. Diagnosis of viral infections of nervous system.
- 10. Laboratory diagnosis of Malaria.

# OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the anatomy of internal iliac artery and its importance.
- 11. Discuss haemodynamic changes in pregnancy, labour and puerperium.
- 12. Describe early development of placenta.
- 13. Describe the synthesis and functions of prostaglandins involved in labour.
- 14. Define tocolysis and discuss any two tocolytics.
- 15. Discuss the microbiological aspects of septic abortion.
- 16. Describe the pathology of gestational trophoblastic disease.
- 17. Discuss the role of nitric oxide in obstetrics.
- 18. Describe the physiology of micturition.
- 10. Discuss control of ovulation.

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Structural abnormalities of chromosomes and add a note on related disorders.
- 11. Discuss the development of Heart.
- 12. Discuss the Renal function tests, their role in various renal diseases.
- 13. Pathophysiology of shock.
- 14. Briefly describe the Coagulation Cascade and how to evaluate a bleeding child.
- 15. Hypervitaminosis states.
- 16. Discuss acute phase reactants in the diagnosis of pediatric disease.
- 17. Describe Mycobacterial culture techniques available.
- 18. Nucleotides in pediatric nutrition
- 10. Monitoring a critically ill child.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the applied anatomy of Brachial plexus. Describe the method of blocking, indications and complications of infraclavicular approach.
- 11. Discuss central venous pressure. Enumerate indications and complications of central venous pressure monitoring.
- 12. Describe major buffers of the body. Mention Anaesthetic importance of these buffers.
- 13. Compare Pharmacokinetics of Thiopentone sodium and Propofol.
- 14. Discuss the mechanism of Anaesthesia theories at cellular levels.
- 15. Discuss the goals of preoperative assessment in relation to different age group.
- 16. Describe the factors that modify neuro muscular blocking action of muscle relaxants.
- 17. Write note on John Snow.
- 18. Narrate the oxygen supply failure protection devices in Anaesthesia machine.
- 10. Describe the methods of sterilization of Anaesthetic equipment .

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the cytoskeleton in health and disease.
- 11. Describe the role of chemokines in inflammation.
- 12. Discuss the role of growth factors in wound healing.
- 13. Describe the opportunistic infections of AIDS and mention the neoplasms found in H.I.V. infection.
- 14. DNA Probes.
- 15. Tonofilaments.
- 16. Define, classify and describe premalignant lesions.
- 17. Mechanism of Metastasis.
- 18. Laboratory Information Systems.
- 10. Intracellular accumulations in cell injury.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 RADIO DIAGNOSIS Paper-I – Basic Sciences

Max. Marks: 100

Note: Answer all questions

Time: 3 Hours

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Enumerate the constituents of developer and fixer. Explain how the radiographic image is formed on a film.
- 11. How bone isotope scan is done. Mention their clinical applications.
- 12. Describe the Ultrasound Contrast Media. Mention the physical principles and clinical applications of Ultrasound Contrast Media.
- 13. How will you investigate a patient with Haematuria? Describe the radiological features in two common renal disorders causing haematuria.
- 14. Describe the anatomy of the subphrenic areas of the abdomen and discuss the radiological features of subphrenic abscess.
- 15. Biological effects of Radiation.
- 16. Write the radiological anatomy and Imaging of Base of skull..
- 17. Describe the principle of computed tomography. What is slip ring technology? What are the advantages of spiral CT over conventional CT?
- 18. Describe the DIGITAL RADIOGRAPHY system.
- 10. Hypotonic Duodeno graphy.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Anterior Mediastinum and cystic anomalies of lungs and mediastinum.
- 11. Hypoxaemic Respiratory failure.
- 12. Pathophysiology of the airways in bronchiectasis.
- 13. Chemotherapeutic agents for non-small cell lung cancer.
- 14. Peripheral chemoreceptors.
- 15. Cholinergic control of airways.
- 16. Respiratory defense mechanisms Discuss.
- 17. Non-Respiratory functions of Lungs.
- 18. Pharmacotherapy in PAH (Pulmonary Artery Hyper Tension).
- 10. Florescent Bronchoscopy.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the virulence factors of the bacteria.
- 11. Immunofluorescence.
- 12. Transduction.
- 13. Gene mapping.
- 14. Nosocomial infections.
- 15. Measurement of Immunity.
- 16. Monovalent antibody test.
- 17. Give an account of B lymphocyte.
- 18. Describe the methods of identifying anaerobic bacteria.
- 10. Quality control in a Diagnostic Microbiology Laboratory.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss "Health is not Stethoscope and Pills".
- 11. Describe the design of a Randomized Controlled Trial.
- 12. Describe in detail disaster preparedness.
- 13. Explain the term emporiatrics.
- 14. Discuss in detail coefficient of correlation.
- 15. Rational use of drugs. Discuss in detail.
- 16. Describe Eugenics and Euthenics.
- 17. How do you classify Descriptive Epidemiology? Describe `TIME TRENDS' in Epidemiology.
- 18. Describe the nutritional factors in certain cardiovascular and metabolic diseases.
- 10. What do you understand by 'iceberg phenomenon of disease"? Discuss the differences between screening and diagnostic tests with suitable examples.

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Papez Circuit.
- 11. Genetics of Alzheimer's disease.
- 12. Immunological abnormalities in mental illness.
- 13. Serotonin and psychopathology.
- 14. Organization and functions of basal ganglia.
- 15. Humanistic approach to personality.
- 16. Explain in detail the Social basis of aggression.
- 17. NMDA Antagonists.
- 18. C.J. Jung.
- 10. Specific statistical methods.

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. What are the various factors influencing the enzyme action with suitable explanation? Add a note on competitive inhibition.
- 11. What is respiratory chain? Describe the flow of electrons in the chain with the release of energy. Add few words on uncouplers.
- 12. What do you understand by T (taut or tense) and R (relaxed) states of Haemoglobin? What is their significance? What are the factors that shift the oxygen dissociation curve to the right and to the left?
- 13. What is isoelectric focusing? Mention its application in clinical biochemistry.
- 14. Explain the principles of Dialysis. Describe the differences between peritoneal and Haemodialysis. Give an account of composition of dialyzing fluids and advantages, disadvantages of dialysis.
- 15. Describe the Molecular basis on Oncogenes and their clinical importance.
- 16. Write an account of Ionophores.
- 17. 'Chi' square test and its implications. Write a note on standard deviation.
- 18. Describe in detail the structure of Mucopolysaccharides. How will you diagnose Mucopolysaccharidosis?
- 10. Define Km value and give a detailed account of its significance.

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Receptors regulating nuclear transcription.
- 11. Kinetics of drug elimination.
- 12. Bioequivalence.
- 13. Novel drug delivery systems.
- 14. Genetic Toxicology.
- 15. Plasma half life and its significance.
- 16. Targeted Drug Delivery.
- 17. Discuss the clinical significance of administration of drugs during pregnancy.
- 18. Prodrugs and their clinical implications.
- Discuss in detail the clinical significance of the administration of drugs in Geriatric Practice.

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss about Super Imposition photography.
- 11. Describe the blood supply of Brain and discuss about the post-mortem findings in a case of Brainstem dysfunction.
- 12. How will you estimate stature of dismembereal mutilated body?
- 13. Medicolegal aspects of organ transplantation.
- 14. Describe the structure and medicolegal importance of hair.
- 15. Discuss the medicolegal aspects of prenatal sex determination.
- 16. Anatomy of Neck structures and medicolegal importance of Laryngeal injuries?
- 17. Thermoregulation in Newborn.
- 18. What are the causes of sudden natural death? Explain with examples.
- 10. Define Stature, methods by which stature of a person can be established. How is stature of a person identified in a mutilated body?

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Micro tubules.
- 11. Myelinogenesis.
- 12. LEPTIN.
- 13. Apoptosis.
- 14. Natriuretic hormones.
- 15. Second messengers.
- 16. Peroxisomes.
- 17. Mechanism of contraction of smooth muscles.
- 18. DNA fingerprinting.
- 10. Explain about Spliceosomes.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 RADIOTHERAPY

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the anatomy and the mode of spread of carcinoma of Nasopharynx.
- 11. What factors determine the severity of normal tissue damage following irradiation?
- 12. What do you understand by the term "Gene amplification"? Write briefly on it.
- 13. Potential Double time.
- 14. What is universal wedge? Discuss the physical aspects and clinical applications of wedge filters
- 15. What is ALARA principle in radiotherapy?
- 16. Radiobiology of HDR Brachytherapy.
- 17.LQ Model.
- 18. Discuss the rationale of combining chemotherapy with radiotherapy and its clinical application.
- 10. Discuss the classification and staging of ovarian tumours.

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2011 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the embryological development of brachial arches. Add a note on branchial cyst.
- 11. Describe the anatomy of myopectineal aperture of Fruehauf. Write briefly on femoral hernia
- 12. Enumerate the sites of Porto-systemic anastomosis. Describe the pathology of portal hypertension.
- 13. Describe the physiology of gastric secretions. Add a note on Zollinger-Ellison syndrome.
- 14. Describe the fascial spaces of the hand. Indicate the principles applicable to all incisions in hand.
- 15. Discuss briefly regulation of serum calcium and write briefly on aetiopathogenesis of medullary carcinoma.
- 16. Describe micturition reflex and formation of calculi.
- 17. Hospital infection.
- 18. Plasma and its derivatives in clinical use.
- 10. Paraneoplastic syndromes.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe Arches of foot and management of flat foot.
- 20. Parathormone.
- 21. Bone-bank.
- 22. Bone scan in skeletal malignancy.
- 23. Bone densitometry.
- 24. Describe Rotator Cuff Injuries.
- 25. Alkaptonuria.
- 26. Synovial fluid analysis and joint lubrication.
- 27. Nerve regeneration.
- 10. Describe skeletal traction and its complications.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the anatomy of visual pathways and visual cortex. Mention the localizing signs for lesions of visual pathway.
- 11. Theories of colour vision.
- 12. Indirect Ophthalmoscope (principle, parts of instrument, merits and demerits).
- 13. Histopathology of RETINOBLASTOMA.
- 14. Describe the recent advances in Glaucoma Medications.
- 15. Describe the various ocular manifestations of staphylococci infection.
- 16. Maintenance of Intra Ocular Pressure.
- 17. Viscoelastics.
- 18. Biochemistry of Tears.
- 10. H.L.A (Human Leukocytic Antigen) & Eye

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the surgical approaches to parapharyngeal space for management of parapharyngeal tumours.
- 11. Discuss the pathology, clinical features and management of carcinoma pyriform fossa.
- 12. Discuss the role of cochlear implants in restoration of hearing.
- 13. Discuss the differential diagnosis of bleeding mass in the nose and management of nasopharyngeal angiofibroma.
- 14. Discuss causes and management of unilateral vocal cord palsy.
- 15. Discuss ENT manifestations of systemic diseases.
- 16. Describe pathogenesis of central perforation in pars tensa and discuss different types of tympanoplasty.
- 17. Discuss the pathogenesis, clinical features and management of Acoustic Neuroma.
- 18. Discuss the management of the metastatic neck node in unknown primary.
- 10.Describe the pathogenesis of obstructive sleep apnoea syndrome and its management.

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Classify the axillary lymph nodes. Describe the areas of drainage and clinical significance of them.
- 11. Describe the boundaries, contents and applied anatomy of superior mediastinum.
- 12. Describe the liver. Add a note on hepatic segmentation and its applied anatomy.
- 13. Describe the thoracic duct. Add a note on its applied anatomy.
- 14. Cavernous sinus and its applied anatomy.
- 15. Collateral circulation.
- 16. Describe the movements of eye ball. Add a note on applied anatomy.
- 17. Describe the hypophysis cerebri. Add a note on hypothalamohypophyseal portal system.
- 18. Define a broncho pulmonary segment and describe those of the Right lung.
- 10. Chromosomal abnormalities that occur due to cell division.

#### D.V.L.

## Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Write an essay on Lymphatic drainage of male & female Genitalia and its significance in STDs.
- 11. Write an essay on pathophysiology of Pruritus.
- 12. Interleukins in STD.
- 13. Write about patterns of inflammation.
- 14. Write about Dermo-Epidermal junction, structure, components and applied aspects.
- 15. Pathogenesis of HIV infection.
- 16. Penile urethra.
- 17. Woods lamp examination.
- 18. Thermo Regulation.
- Anti Histamines: Classification, indications, dosage and adverse effects.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2011 HOSPITAL ADMINISTRATION

### Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Being Administrator how do you bring the change in the organization?
- 2. Matrix organization.
- 3. Manager roles approach in the management.
- 4. Define "Conflict" and enumerate various conflicts that arise in the hospital. How do you resolve the conflicts in the organization?
- 5. Management by objective.
- 6. Performance appraisal.
- 7. Gantt charts.
- 8. Delphi technique.
- 9. Johari window.
- 10. SWOT analysis.

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# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011

#### **GENERAL MEDICINE**

Paper-II – Disorders of C.V.S., Respiratory System, Kidney, G.I.T. including Liver and Pancreas.

Time: 3 Hours Max. Marks: 100

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management of infective endocarditis.
- 2. Solitary Pulmonary nodule.
- 3. Medical Acute Abdomen.
- 4. Serology of viral hepatitis.
- 5. Mechanism of immune mediated glomerular injury.
- 6. Primary Pulmonary Hypertension.
- 7. Chronic Pancreatitis.
- 8. Irritable bowel syndrome.
- 9. Newer drugs in the management of Bronchial Asthma.
- 10. Antiarrhythmic Drugs.

# M.S. DEGREE INTERNAL EXAMINATION – NOVEMBER, 2011 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss diagnosis and medical management of ectopic gestation.
- 2. Discuss briefly diagnosis of cephalo pelvic disproportion (CPD).
- 3. How will you manage a case of adherent placenta?
- 4. What are the causes of low birth weight? What are the problems in the management of very low birth weight babies?
- 5. Discuss the current management of Rheumatic heart disease with pregnancy.
- 6. Write short notes on:
  - a) Complications of forceps delivery
  - b) Intrapartum complications of twin pregnancy
- 7. Write short notes on:
  - a) Screening for neural tubal defects (NTD).
  - b) Shoulder dystocia.
- 8. Discuss modern methods of diagnosis of foetal distress.
- 9. Discuss the causes and management of premature rupture of membranes.
- 10. Discuss the diagnosis and management of hypothyroidism complicating pregnancy.

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Prevention and management of oxygen toxicity in the newborn.
- 2. Investigations and management of prolonged jaundice in a two month old infant.
- 3. Clinical manifestations of inborn errors of metabolism in the neonatal period.
- 4. Aetiology and management of neonatal meningitis.
- 5. Management of persistent pulmonary hypertension in the newborn.
- 6. Recognition and control of nosocomial infections in NICU.
- 7. Pattern of Growth in preterm and small for date babies.
- 8. Aetiology investigations and management of acute renal failure in the newborn.
- 9. Pattern of sleep disorders in children.
- 10. Etiology of neonatal hypoglycemia and management of persistent hypoglycemia.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 ANAESTHESIOLOGY

Paper-II: Anaesthesia in relation to associate systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the causes and treatment of Neurogenic Pulmonary Oedema.
- 2. Explain Jehovah's Witness and its importance to the anaesthetists.
- 3. Discuss the merits and demerits of General VS Regional anaesthesia for Lower Limb Vascular Surgery.
- 4. Describe the biotransformation of intravenous muscle relaxants.
- 5. Write notes on sevoflurane in modern anaesthesia practice.
- 6. Discuss the scavenging system and its role in modern anaesthetic practice.
- 7. What are immunonutrients and their role in management of critical patients?
- 8. Role of Anaesthesiologist in limiting biological disaster.
- 9. Outline post operative visual loss and concerns to Anaesthesiologist.
- 10. Discuss the current measures instituted in anaesthesia practice to ensure perioperative patient safety.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe pulmonary alveolar proteinosis.
- 2. Describe the aetiopathogenesis, pathology and significance of oral submucous fibrosis.
- 3. Discuss non-infective endocarditis.
- 4. Oncocytomas.
- 5. Aneurysms.
- 6. Enumerate ulcerative lesions of the bowel and discuss etiopathogenesis of Inflammatory bowel disease.
- 7. Discuss the etiopathogenesis, pathology and lab diagnosis of Acute Pancreatitis.
- 8. Discuss the pathology of Inflammatory neuropathies.
- 9. Discuss the pathology of Follicular lymphoma and discuss its immunophenotyping.
- 10. Discuss the pathogenesis of glomerular injury.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 RADIO DIAGNOSIS

Paper-II: Components of MD Radio Diagnosis (Clinical Radiology and imaging related to Gastrointestinal tract, Genitourinary tract and Obstetrics and Gynaecology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 1. Imaging features of Ovarian Tumours.
- 2. Genetic screening.
- 3. Briefly mention the contrast examinations available for the urinary tract. Add a note on voiding cystourethrotrogram.
- 4. How will you investigate a case of Peptic Ulcer? Describe the radiological findings.
- 5. Describe the radiological findings in intestinal obstruction.
- 6. Short notes on:
  - a) Congenital Megaureter
  - b) Oesophageal varices
- 7. Write short notes on:
  - a) Malrotation of Gut
  - b) Ulcerative colitis
  - c) Enteroclysis
  - d) Hydatid cyst in liver
- 8. How will you investigate a case of abdominal trauma?
- 9. Describe the USG findings in hepatobiliary pathologies.
- 10. Short notes on:
  - a) Double contrast barium enema
  - b) USG findings in first trimester

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#### PULMONARY MEDEICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Endocrine and metabolic manifestations of Tuberculosis.
- 2. Colliquative Tuberculosis.
- 3. Severe Haematological abnormalities in Tuberculosis.
- 4. Treatment of Pulmonary Tuberculosis in pregnancy and lactation
- 5. Silico tuberculosis.
- 6. Immunologic tests for the diagnosis of Tuberculosis.
- 7. Massive haemoptysis in a case of Pulmonary Tuberculosis on antituberculous therapy.
- 8. RNTCP Treatment Regimen for category II, drugs and their sideeffects.
- Management of Pulmonary Tuberculosis in a patient with Chronic Renal Failure.
- 10. Walgreen's time-table of Tuberculosis.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write an essay on mycoplasma which causes human disease.
- 2. Classify bacteroides. Write briefly the pathogenicity and laboratory diagnosis of infections caused.
- 3. Compare Pneumococci with other  $\alpha$  haemolytic cocci.
- 4. Flesh eating Bacteria.
- 5. Melioidosis.
- 6. Carrion's disease.
- 7. HACEK Organisms.
- 8. Non-sporing anaerobes.
- 9. Lyme disease.
- 10. Botulism.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Critically review the epidemiological pattern of various Cancers in India.
- 2. Discuss the concept of disease control, elimination and eradication.
- 3. Discuss the role of public health laboratory in prevention and control of communicable disease.
- 4. Describe the contribution of William Budd to 'Epidemiology'.
- 5. Plan of Action for Vision-2020 in our country.
- 6. Multiple Risk Factor Intervention Trial (MRFIT).
- 7. Newer Vaccines for Disease Control.
- 8. Integrated Vector Control.
- 9. If you are posted to a disaster affected area and resources per se are not the constraints, how do you create an effective disaster management?
- 10. Describe in detail the primary prevention of Diabetes Mellitus.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Consultation liaison psychiatric services.
- 2. Neuropsychiatric aspects of REM sleep.
- 3. Frontal lobe disorders.
- 4. Neuroimaging findings in various dementia syndromes.
- 5. Catatonia in medically ill.
- 6. Aetiological factors contributing to psychiatric disturbances following head injury.
- 7. Prion diseases.
- 8. Psychiatric manifestations of Systemic Lupus Erythematosis.
- 9. Kluver Bucy syndrome.
- 10. Normal Pressure Hydrocephalus.

### M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Compare and contrast breakdown of glycogen in muscle and Liver. Discuss the role of harmones in the process.
- 2. Three Dimensional structures of proteins.
- 3. Role of Calmodulin in the regulation of intra cellular Ca<sup>++</sup> level.
- 4. Chemistry and Metabolism of Phospholipids.
- 5. Entero-hepatic circulation of Bile acid. What are the biochemical tests done to differentiate various types of Jaundice?
- 6. Give an account of Molecular cloning in clinical diagnosis and management.
- 7. Explain the electron transport chain and add a note on inhibitors of Electron transport chain.
- 8. Describe the structure and functions of Glycosaminoglycans.
- Explain the Recombinant DNA Technology in Molecular analysis of diseases.
- 10. Describe the composition of CSF and their clinical significance.

#### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Therapeutic uses of anti-cholinesterase agents.
- 2. Amino acids as central neurotransmitters.
- 3. Inhibition of Na<sup>+</sup> K<sup>+</sup> 2 cl <sup>-</sup> symport.
- 4. SSRI (Selective serotonin reuptake inhibitors).
- 5. Potassium channel activators.
- 6. Platelet activating factor antagonists.
- 7. Role of beta-blockers in congestive heart failure.
- 8. Pentazocine.
- Discuss the experimental methods used to evaluate antihypertensive drugs.
- 10. Pharmacotherapy of Migraine.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 FORENSIC MEDICINE

Paper-II: Pathology and Microbiology in relation to Forensic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the pathogenesis of putrefaction.
- 2. Medicolegal aspect of exotic diseases.
- 3. How will you justify septicemia as the cause of death at postmortem examination?
- 4. What is precipitin test and discuss the uses of it in an expert opinion of yours?
- 5. Teeth bite marks and its Medico legal importance.
- 6. Forensic application of DNA technology.
- 7. Various immunological methods used in Forensic Medicine.
- 8. Microbiological investigations at autopsy.
- 9. Adult Respiratory Distress Syndrome.
- 10. Discuss the aetiology and pathology of post-traumatic Emboli.

# M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Determinants of GFR.
- 2. Lower Oesophageal function.
- 3. Physiology of growth.
- 4. Humoral mediated immunity.
- 5. Functions of hypofunction of parathormone.
- 6. Tissue transplantation.
- 7. Hemostasis.
- 8. Indicators of ovulation and hormonal influence.
- 9. Feto-placental unit.
- 10. Functions of plasma proteins.

### M.S. DEGREE INTERNAL EXAMINATION – NOVEMBER, 2011 RADIOTHERAPY

Paper-II – CNS, Head & Neck, Orbit Thyroid, Lung and Mediastinal Malignancies, Malignancies Breast Oesophagus, Lymphomas', Leukemias and Paediatric Tumours.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What are the indications of Definitive Radiotherapy for non- small cell lung cancer? Describe the techniques of irradiation used for Lung Cancer.
- 2. Invasive Thymoma.
- 3. Side effects of therapy of Hodgkin's Disease.
- 4. A 5 year old child is diagnosed to have Medulloblastoma. Explain the further clinical management of the child.
- 5. Discuss the management of SVC obstruction.
- 6. Discuss the role of prophylactic irradiation in cancer treatment.
- 7. Discuss the anatomy, lymphatic drainage and management of nasopharyngeal carcinoma.
- 8. Describe the role of Breast Conservation Therapy in Ca. Breast.
- 9. Discuss the clinical signs, symptoms and management of carcinoma of soft palate.
- 10. Discuss the biological effects seen after an accidental whole body exposure to radiation.

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## M.S. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Classify the Diaphragmatic hernia and discuss the clinical feature and management of BOCHDALEK Hernia.
- 2. Write briefly the clinical features and management of Patent Ductus ARTERIOSIS.
- 3. Discuss the Rupture Male Urethra.
- 4. Discuss cytokine response to injury.
- 5. Discuss cancer genetics.
- 6. Discuss cardiac risk assessment in general surgery.
- 7. Discuss the pathology, staging, clinical features and treatment of Hodgkin's disease.
- 8. Discuss the clinical features, investigation and management of rotator cuff tears.
- 9. ANDI (Aberration of normal development and involution) in breast. Discuss.
- 10. Classify splenic injuries. Describe the investigations and management of the same.

## M.S. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING

- 1. Fracture neck of femur in 30 years old.
- 2. Laugh Hansen's classification of ankle injuries.
- 3. Classification of spinal injuries.
- 4. Classification of dislocation of hip, management of anterior dislocation.
- 5. Classify tibial plateau fractures. Discuss management of medial condyle fractures.
- 6. Hand shoulder syndrome.
- 7. Post-Traumatic Osteodystrophy.
- 8. March fracture.
- 9. Cruciate ligament injuries.
- 10. Non-Union of scaphoid.

## M.S. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 OPHTHALMOLOGY

Paper-II: Lids, Ocular adenexa, systemic ophthalmology neurophthalmology, community ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Aetiopathogenesis and Management of Neovascular Glaucoma.
- 2. White Uveitis.
- 3. How will you investigate a 50 years old female who comes with watering in one eye?
- 4. Describe the ocular manifestations of cysticercosis.
- 5. Write short notes on:
  - a) Lamellar Keratoplasty
  - b) Unilateral papilledema
- 6. Describe the principles of ophthalmic plastic surgery. Describe briefly procedures used to correct Lid Coloboma.
- 7. How do you diagnose and manage a case of Endophthalmitis?
- 8. Describe the clinical features and treatment of optic neuritis.
- 9. How will you investigate and manage a case of convergent squint in a three year old child?
- 10. Classify diabetic retinopathy and brief its management.

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## M.S. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss occult primary.
- 2. Discuss differential diagnosis and management of otosclerosis.
- 3. Discuss aetiology clinical features and management of angiofibroma.
- 4. Discuss ENT manifestations of systemic diseases.
- 5. Enumerate causes of vertigo. Discuss surgical management of Meniere's disease.
- 6. Describe the precancerous lesions of the oral cavity and their management.
- 7. Discuss the pathology and management of glottic carcinomas.
- 8. Describe the surgical approaches to parapharyngeal space for management of parapharyngeal tumours.
- 9. Write short notes on:
  - a) Phono surgery
  - b) Mediastinitis
  - c) Carotidynia
- 10. Describe the pathology of salivary gland tumours and management of submandibular salivary gland tumours.

## M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Splanchnic Nerves.
- 2. Arterial anastomosis on the back of thigh.
- 3. Lymphatic drainage of lower limb.
- 4. Describe the soft palate. Add a note on its applied anatomy.
- 5. Describe the perineal pouches. Add a note on extravasation of urine.
- 6. Write short notes on:
  - a) Bell's palsy
  - b) Hepatorenal pouch
- 7. Pericardium.
- 8. Pelvic diaphragm.
- 9. Gross anatomy of pancreas.
- 10. Arch of aorta.

## M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER,2011 D.V.L.

Paper-II: General Dermatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Sweet syndrome.
- 2. Acute skin failure.
- 3. Staphylococcal scaled skin syndrome.
- 4. Lentiginosis.
- 5. Etretinate.
- 6. Neutrophilic dermatoses.
- 7. Erythema elevatum diutinum.
- 8. Intrauterine diagnosis of dermatological disorders.
- 9. Crest syndrome.
- 10. Agents for photoprotection.

### M.D. DEGREE INTERNAL EXAMINATION – NOVEMBER, 2011

#### HOSPITAL ADMINISTRATION

Paper-II: Heath Administration and Medical Care.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Role of hospital in Primary Health Care with special reference to District Health System?
- 2. What is the objective of National Leprosy Eradication Programme?
- 3. National Cancer Control Programme.
- 4. Concept of Family Medicine.
- 5. I.C.D.S.
- 6. E.S.I.
- 7. Sampling method.
- 8. Medical Ethics.
- 9. Cost Effectiveness and Cost Benefits studies.
- 10. Role of the private sector in health care delivery.

100-NR

M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

GENERAL MEDICINE Paper-I – Basic Medical Sciences Time: 3 Hours Max. Marks: 100

Note: Answer all questions

## All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Blood supply of heart and its clinical implication.
- 2. Multi factorial genetic disorders.
- 3. Gene therapy.
- 4. Management of obesity.
- 5. Parentaral Nutrition.
- 6. Pellagra.
- 7. Discuss sleep disorders.
- 8. Mechanism of cough and diagnostic approach to a patient with cough.
- 9. Discuss Bilirubin Metabolism
- 10. Approach to a patient with anemia.

## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the endocrinology of menstruation.
- 20. Write about the physiology of uterine action.
- 21. What are the anatomical changes in the Genital tract in puerperium.
- 22. Discuss about the course of pelvic ureter and sites of ureteric injuries.

How to prevent them?

- 23. Describe the cardiovascular functions in pregnancy.
- 24. Write a note on ovulation induction drugs.
- 25. Factors influencing Maternal Mortality in India.
- 26. Physiological anaemia in pregnancy.
- 27. Perinatal infections.
- 10. Puerperial pyrexia causes and management.

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Importance of urinary screening tests in mental retardation.
- 20. Lung function tests in children.
- 21. Fetal circulation and the physiological changes which occur at birth.
- 22. Iron metabolism in health and disease.
- 23. Write short notes:
  - i. Adverse effects of Amino glycosides
  - ii. Polymerase chain reaction
- 24. Pathophysiology of acute renal failure
- 25. Antiviral drugs in paediatrics.
- 26. Pathogenesis of disseminated intravascular coagulation.
- 27. Pathophysiology of cyanotic spells.
- 10. Immunological factors in breast milk.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Write briefly on monitoring coagulation in the perioperative period.
- 20. Role of  $\alpha$ 2 (Alpha) agonists in anaesthesia.
- 21. Methods of sterilization of anaesthesia equipment and accessories.
- 22. Ivan Magill.
- 23. Anatomy of circle of Willis and importance.
- 24. Write briefly about double lumen tubes, indications and complications.
- 25. Enumerate tests for autonomic nervous system.
- 26. Check list for anaesthesia machine.
- 27. Laryngeal mask airway devices, uses, types.
- 10. Interpretation of arterial blood gas tests.

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Classify cell injuries mention the sub-cellular alterations. Mention about ischemic and free radical injury.
- 20. Discus the paraneoplastic syndromes.
- 21. Discuss the inborn errors of metabolism.
- 22. Describe the role of tobacco in the causation of disease.
- 23. Define an embolus. Classify and write in brief about pulmonary embolism.
- 24. Write about the macrophages in health and disease.
- 25. What are cytokines? Write their role in inflammation.
- 26. Discuss primary immunodeficiency.
- 27. Discuss the role of neutrophils in health and disease.
- 10. Discuss shock. Write in brief about septic shock.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 RADIO DIAGNOSIS

Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe the radiological anatomy of rotator cuff muscles. Role of ultrasound in rotator cuff pathology.
- 20. Explain in detail radioactive decay.
- 21. Write short notes on
  - a) Interatrial septal defect plain x-ray findings.
  - b) Soft tissue calcifications.
  - c) Pathology of rheumatoid arthritis.
  - d) Achondroplasia
  - e) Gardner's syndrome
- 22. Discuss the radiological features of osteoarthritis.
- 23. What is scintigraphy? Mention how thyroid scintigraphy done?
- 24. Describe the anatomy of mediastinum.
- 25. Explain in detail of performing double contrast barium enema.
- 26. Write short notes on:
  - a) Carpal tunnel syndrome
  - b) Mammographic X-ray tube
  - c) Pulmonary findings in sarcoidosis.
  - d) Atom.
  - e) Properties of X-ray.
- 27. Write briefly about ascending urethogram.
- 10. Explain in detail how X-rays interacts with matter.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Accessory fissures of lung.
- 20. Transbronchial biopsy.
- 21. Metabolic functions of lung.
- 22. Indirect methods of measurement of dyspnoea.
- 23. Mediastinal Emphysema.
- 24. Forced vital capacity.
- 25. Innervation of lung.
- 26. Hypogenetic lung syndrome.
- 27. Primary ciliary dyskinesia.
- 10. Signs of pneumothorax in supine patients.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Compare Prokaryotes and Eukaryotes.
- 20. Write an essay on bacterial plasmids.
- 21. Give an account of cell mediated immune response.
- 22. Discuss the principle and types of Enzyme Immuno Assays.
- 23. Write an essay on Minimum Inhibitory Concentration (MIC) determination in clinical microbiology.
- 24. Give an account of various typing methods of bacteria.
- 25. Write an essay on autoimmune diseases.
- 26. Write in detail on Widal test and its present day relevance.
- 27. Give an account of sterilization by moist heat.
- 10. Write an essay on immuno modulators.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

19. Discuss the Socialized Medicine & Social Medicine.

- 20. Define social security & social assistance. Discuss the merits & demerits of social security.
- 21. Discuss the disaster preparedness in India.
- 22. Non parametric test.
- 23. Discuss operational research with an example.
- 24. Discuss the age pyramid.
- 25. Write the critically review Gomez classification of PEM with relation to Indian condition.
- 26. Rationality behind supplementary nutritional programmes.
- 27. Describe the evolution of conception in the etiology of disease till date.
- 10. How the formal and informal leader in IEC.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Rorsach ink blot test.
- 20. Stages of sleep.
- 21. Theories of emotions.
- 22. Visual pathway.
- 23. Chronobiology.
- 24. SPECT.
- 25. Classical conditioning.
- 26. Glutamate receptors.
- 27. Limbic system.
- 10. Aphasia.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. How is ion exchanged equilibrated with respect to Donnon's Equilibrium theory?
- 20. Explain standard 'T' test and sampling. What is its significance?
- 21. Describe the co-enzymes involved in Electron Transport Chain.
- 22. What is oxidative phosphorylation and explain its importance in ATP synthesis.
- 23. What are the basic principles of centrifugation? Describe ultra centrifugation.
- 24. Describe the safety aspects of the use of radioactive isotopes, detection, and measurement of radioactivity.
- 25. Derive Michaelis Menten equation and write its significance.
- 26. Write briefly on
  - a. Flame Photometry
  - b. UV spectroscopy
  - c. Electron microscopy
- 27. Write the structure of cyclic AMP and its role in cellular communication.
- 10. How is pH of blood maintained in the body?

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Enzyme inhibitors and drug toxicity.
- 20. Clearance and drug elimination.
- 21. Screening of a new drug molecule for antidiabetic activity.
- 22. Null hypothesis and probability value.
- 23. P glycoprotein.
- 24. Transgenic animal model.
- 25. Principles and applications of HPLC.
- 26. Different methods of bioassay.
- 27. Therapeutic drug monitoring.
- 10. Phase IV of clinical trial.

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe age of adolescence. How will you confirm this age by radiological investigation?
- 20. Mention the clinical and the medicolegal causes of the three Modes of death.
- 21. Describe the patho-physiology of Shock.
- 22. Describe antidotes.
- 23. Describe eruption of teeth in relation to the age of mixed dentition.
- 24. Describe important human races in relation to the Cephalic index.
- 25. Define "Sudden Death". Describe its cardiovascular causes.
- 26. Describe the differential diagnosis of coma due to opium.
- 27. What are the osteological changes which take place from sixteen to twenty one years of age in humans?
- 10. Describe the role of foramen ovale in foetal physiology.

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Excitation contraction coupling.
- 20. Intercellular connections.
- 21. Neuromuscular blocking agents.
- 22. Wallerian degeneration.
- 23. Compound action potential
- 24. Voltage Clamp.
- 25. Active and Passive transport.
- 26.a) Denervation
  - b) Hypersensitivity
- 27. Oxygen debt.
- 10. Neuromuscular junction.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Anatomy of anal canal.
- 20. Anatomy of parotid gland
- 21. Parathormone.
- 22. Liver function tests.
- 23. Echinococcus granulosus life cycle
- 24. Helicobacter pylori.
- 25. Factors affecting wound healing.
- 26. Anti coagulants.
- 27. Paraneoplastic syndrome.
- 10. Pathology of pulmonary embolism.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Fracture healing.
- 29. Articular cartilage.
- 30. Chemotherapy of bone tumors.
- 31. Hyper parathyroidism.
- 32. Radiological findings in Perthe's disease.
- 33. Radionuclides in orthopaedics
- 34. Tennis elbow.
- 35. Spinal anaesthesia.
- 36. Cyclo-oxygenase inhibitors.
- 10. Nerve conduction studies.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe anatomy of superior orbital fissure.
- 20. Discuss ocular viscoelastic devises. .
- 21. Describe histopathology of retinoblastoma.
- 22. Describe optics of indirect ophthalmoscopy.
- 23. Describe life cycle of Toxoplasma gondii and lesions caused by it in the eye.
- 24. Discuss slit lamp biomicroscopy of anterior segment of the eye.
- 25. Discuss development of retina.
- 26. Discuss cover tests and their interpretation.
- 27. Describe anatomy of cavernous sinus.
- 10. a) Blood supply of visual cortex.
  - b) Abnormal pupillary reflexes.

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Nasopharynx anatomy.
- 20. Recurrent Laryngeal nerve.
- 21. Nasal cycle.
- 22. β-Haemolytic streptococcus.
- 23. Mechanism of speech.
- 24. Tracheo bronchial segments.
- 25. Vasovagal shock.
- 26. Chemicals used in ENT cauteries.
- 27. Steroids in nasal pathology.
- 10. Hypotensive anaesthesia in ENT surgeries.

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Fascial spaces of hand and their surgical importance.
- 20. Pelvic diaphragm and surgical anatomy.
- 21. Inguinal canal and applied anatomy.
- 22. Hepatic portal system and applied anatomy.
- 23. Surgical anatomy of Thyroid gland.
- 24. Venous drainage of lower limb and applied anatomy.
- 25. Tissue spaces around the jaws and applied anatomy.
- 26. Thoracic part of sympathetic trunk and its surgical anatomy.
- 27. Surgical anatomy of rectum.
- 10. Surgical anatomy of pleura and its surgical importance.

#### D.V.L.

## Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Dyskeratosis
- 20. TNF alpha in Dermatology
- 21. Biology of Neisseria gonorrhoea
- 22. Cutaneous innervation
- 23. Topical negative pressure devises
- 24. Azathioprine
- 25. Hair cycle
- 26. Biologic response modifiers
- 27. Dermatoscopy
- 10. Melanogenesis

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M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

GENERAL MEDICINE

## Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Polycythemia
- 11. Oncologic emergencies
- 12. Neurologic manifestations of SLE.
- 13. Chronic fatigue syndrome
- 14. Adverse reactions to Blood transfusion.
- 15. Approach to a patient with cardiac murmur.
- 16. Sepsis.
- 17. Acromegaly.
- 18. Approach to a patient with chronic constipation.
- 10. Tests to detect H. Pylori.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Write about screening for Diabetes in pregnancy.
- 11. Causes and diagnosis of early pregnancy bleeding.
- 12. Partography and its importance in labor.
- 13. Write a note on fetal therapy.
- 14. Prediction and prevention of preterm labor.
- 15. Vaginal birth after caesarean section.
- 16. Use of Doppler in Obstetrics.
- 17. Fetal and maternal injuries in breech delivery.
- 18. Twin to twin transfusion.
- 10. DIC in obstetrics causes and management in abruptio placentae.

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Apnea in newborn: definition, causes and management.
- 20. Acute flaccid paralysis surveillance.
- 21. Discuss the steps to reduce perinatal mortality in your area.
- 22. Write short notes:
  - a. Age independent anthropometry.
  - b. Sexual maturity rating.
- 23. How do you approach a preschool child with short stature?
- 24. Discuss common behavioural problems in children.
- 25. Discuss the etiology and management of convulsions on the first day of life.
- 26. Attention deficit and hyperactivity disorder.
- 27. Short notes:
  - a) National Immunization Day
  - b) Vaccine vial monitor
- 10. Dyslexias: Diagnosis and management.

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Use of ultrasound in anaesthesia and critical care.
- 11. Write briefly about superficial and deep cervical plexus blocks and uses.
- 12. Neuro assisted ventilation.
- 13. Management of hypernatremia.
- 14. Fasting guidelines for paediatric patients.
- 15. Acid aspiration syndrome.
- 16. Importance of clinical audit.
- 17. Induced hypothermia.
- 18. Scavenging systems.
- 10. Different approaches for brachial plexus blocks.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the etiology, pathogenesis, pathology and lab diagnosis of myocardial infarction.
- 11. Discuss about gastro intestinal stromal tumors.
- 12. Write about etiology of prostatic carcinoma. Mention the mimics of prostatic carcinoma.
- 13. Discuss giant cell lesions of bone.
- 14. Discuss multiple endocrine neoplasias.
- 15. Discuss alcoholic liver disease.
- 16. Describe infectious diseases of brain.
- 17. Discuss vesiculobullous lesions of skin.
- 18. Write about Respiratory Distress Syndrome.
- 10. Write the causes of perinatal death, add a note on role of placental examination.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 10. Discuss the differential diagnosis of osteolytic lesions of skull.
- 11. Explain in detail the radiological features of Fibrous dysplasia.
- 12. Describe the radiological and imaging features of renal tuberculosis.
- 13. Write short notes on:
  - a. Ectopic kidney
  - b. Anencephaly
  - c. CT findings in fontal mucocele
  - d. Isotope findings in biliary atresia
  - e. Haemangioma of liver
- 14. How will you evaluate cerebrovascular accidents?
- 15. Explain in detail radiological and imaging features of bladder carcinoma.
- 16. Describe the imaging features of Arnold-Chiari Malformation.
- 17. Write short notes on:
  - a) Down's syndrome
  - b) TRUS of prostate
  - c) Subarachnoid haemorrhage
  - d) Coarctation of aorta
  - e) Tuberous Sclerosis
- 18. Describe the radiological features of pulmonary tuberculosis.
- 10. Briefly mention imaging features of portal hypertension.

#### PULMONARY MEDEICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Staining techniques for acid fast bacilli.
- 11. Soft tubercles.
- 12. Tuberculosis in elderly.
- 13. Ideal short course chemotherapy in Tuberculosis.
- 14. Poncet's disease.
- 15. Mycobacterial diseases in Acquired Immuno Deficiency Syndrome.
- 16. Protective efficacy of BCG vaccine.
- 17. Diagnosis and management of right sided pleural effusion in a 60 year old patient.
- 18. Tuberculous empyema.
- 10. Congenital Tuberculosis.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Give an account of Shigellosis.
- 11. Give an account of Lab diagnosis of urinary tract infections.
- 12. Give an account of Enterococci.
- 13. Discuss the Lab diagnosis of a case of pyrexia of unknown origin.
- 14. Discuss the role of Escherichia Coli as an aetiological agent of acute diarrhea.
- 15. Give an account of diseases caused by Staph aureus and its Lab diagnosis.
- 16. Discuss Legionellae and unusual bacterial pathogens.
- 17. Give an account of epidemiology and Lab diagnosis of Plague.
- 18. Give an account of Group A Streptococci.
- 10. Write an essay on Gonorrhoea.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Give your opinion regarding inclusion of hepatitis B vaccine on the national immunization schedule.
- 11. Current strategy of filariasis control in India.
- 12. Discuss with examples the steps to conduct case control studies add a note on biases.
- 13. Discuss MDT in Leprosy.
- 14. Write on biological transmission of diseases.
- 15. Discuss chemoprophylaxis.
- 16. Cancer registry.
- 17. Strategy behind intensified pulse polio immunization.
- 18. Childhood blindness.
- 10. Prospects of HIV / AIDS vaccines.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Steroids in psychiatry.
- 11. Neuropsychiatric complications of head injury.
- 12. Obesity.
- 13. Malingering.
- 14. Non pharmacological management of dementia.
- 15. Age related memory impairment.
- 16. Neuropsychiatric complications of HIV.
- 17. Thyroid disorders and psychiatry.
- 18. Epilepsy and psychosis.
- 10. Chronic fatigue syndrome.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the biochemical aspects, sources, disorders associated with vitamins affecting nerves.
- 11. Describe the chemistry, metabolism, clinical manifestations of Cholesterol in the body.
- 12. Explain the functions of ATP in skeletal muscle contraction.
- 13. Describe the relationship, chemistry, metabolism between dopamine, Epinephrine and nor-epinephrine.
- 14. Short account of Phospholipids.
- 15. Write urea cycle and its regulation. Mention the inborn errors met with in the cycle.
- 16. Describe the Chemistry, metabolism and regulatory circuit of purine metabolism and biosynthesis.
- 17. Discuss the role of glutamate dehydrogenase in Nitrogen balance (or) Give the pathway for the formation of serotonin Mention its clinical applications.
- 18. Outline the biochemical functions of T.P.P. Describe the sources, deficiency manifestations of Thiamine.
- Describe the regulation of multienzyme pyruvate dehydrogenase complex.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

#### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Summarize the pharmacodynamic of antiepileptics modulating GABA neurotransmitter.
- 20. Non cardiovascular uses with rational of sympathomimetics.
- 21. Summarize the sites of action with examples of drugs modulating the renin-angiotensin aldosterone system.
- 22. Discuss the role of beta blockers in congestive cardiac failure.
- 23. Anesthetic adjuncts.
- 24. Anxiolytics.
- 25. Pharmacotherapy of Alzheimer's disease.
- 26. Potassium channel openers.
- 27. Malignant hyperthermia.
- 10. 5HT₃ antagonists.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe the role played by bacteria in seafood and bacterial food poisoning.
- 20. Describe the role played by bacteria in the late changes taking place in the dead body.
- 21. What is the cause of the sterile changes taking place in the dead body and describe one such change.
- 22. Describe the late causes of death in burn.
- 23. Describe how CNS pathology causes Sudden Death.
- 24. How can you microscopically differentiate emphysema in lungs from lung consolidation?
- 25. What is scar? Describe the process of healing.
- 26. Describe the causes of death due to anaesthesia.
- 27. Describe the postmortem findings in death due to asphyxia.
- 10. Describe the process of anoxia and the resulting pathology.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Immunoglobulins.
- 20. Leucopoiesis.
- 21. Experimental evidences for gastric juice secretion.
- 22. Enterohepatic circulation.
- 23. Artificial kidney.
- 24. Diabetogenic hormones.
- 25. Placental hormones.
- 26. Radioimmune assay.
- 27. Spermatogenesis.
- 10. Tubuloglomerular feedback.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss in detail about pelvic fractures, their types, mechanism of injury, associated injuries and their management.
- 11. Discuss etiological, clinical features and management of carpal tunnel syndrome.
- 12. Discuss ANDI
- 13. Etiology and management of thyrotoxicosis
- 14. Etiology, clinical features and management of cholangiocarcinoma.
- 15. Discuss the differential diagnosis and management of ulcer foot.
- 16. Etiology, types, clinical features and management of perianal abscess.
- 17. Classify skin tumours. Write detail about basal cell carcinoma.
- 18. Write the Development of urinary bladder. Write the types and management of ectopia vesicae.
- 10. Classify parotid tumours. Discuss in detail about malignant parotid tumours.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 19. Tetanus.
- 20. Supracondylar fracture of humerus.
- 21. Malleolar fractures.
- 22. Monteggia's fracture dislocation.
- 23. Posterior dislocation of hip joint.
- 24. Cruciate ligament injuries.
- 25. Compound fracture of tibia in a young adult.
- 26. Automatic bladder.
- 27. Fracture of clavicle.
- 10. Fracture of scaphoid.

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## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Ocular manifestations of Zoster Ophthalmicus.
- 11. Clinical features and management of basal cell carcinoma.
- 12. IOL Power calculation in paediatric cataract.
- 13. Discuss principles of keratorefractive surgeries.
- 14. Assessment of refractive errors and management in a child of 3 years.
- 15. Aetiology, clinical features and management of acute choroiditis.
- 16. Discuss evaluation of ptosis in a child.
- 17. Discuss management of chemical burns of eye.
- 18. Surgical management of pterygium.
- 10. a) Iris nodules
  - b) Bullous keratopathy

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## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss tumours of pyriform fossa its aetiology, clinical features and management.
- 11. Discuss Mucor mycosis of nose and PNS with management.
- 12. Discuss electrocochleography and its application in cochlear implant.
- 13. Benign conditions in vocal cord and its management.
- 14. Enumerate different types of neck incisions and discuss block dissection for Ca. larynx secondaries.
- 15. Discuss septorhinoplasty.
- 16. Different types of tracheostomy tubes. Brief management of subglottic stenosis.
- 17. Discuss pathogenesis, clinical features and management of glomus jugulare.
- 18. Discuss aetiopathogenesis, clinical features and management of acquired cholesteatoma.
- 10. Discuss midline granuloma of nose.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Parotid gland.
- 20. Tympanic cavity.
- 21. Carpo metacarpal joint of thumb.
- 22. Conducting system of heart.
- 23. Lesser sac of peritoneum.
- 24. Age changes of mandible.
- 25. Urinary bladder
- 26. Duodenum.
- 27. Azygos system of veins.
- 10. Describe the inguinal lymph nodes.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

#### D.V.L.

#### Paper-II

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Impetigo herpetiformis.
- 11. Staphylococcal scalded skin syndrome.
- 12. Paraneoplastic pemphigus.
- 13. Lupus profundus.
- 14. White dermographism.
- 15. Chronic paronychia.
- 16. Graft versus host disease.
- 17. Granulomatous cheilitis.
- 18. Autoimmune urticaria.
- 10. Red man syndrome.

# M.D. DEGREE EXAMINATION –OCTOBER/NOVEMBER, 2011 GENERAL MEDICINE

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Cardiac arrest.
- 11. Evaluation of hypothyroidism.
- 12. Approach to a patient with Hematuria.
- 13. Hyperkalemia.
- 14. Evaluation of an adult with seizures.
- 15. Mood disorders.
- 16. Hypoglycemia.
- 17. Management of snake bite.
- 18. Thrombolysis in Ac.M.I.
- 10. Metabolic acidosis.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OBSTETRICS & GYNAECOLOGY

Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Evaluation of a case of postmenopausal bleeding.
- 11. Place of GnRH analogues in Gynaecology.
- 12. Vault prolapse.
- 13. Extra uterine endometriosis Discuss signs & symptoms and diagnosis.
- 14. Intrauterine devices.
- 15. Screening for ovarian carcinoma.
- 16. RU-486 Its application in gynaecology.
- 17. Benign neoplasms of vulva.
- 18. Contraindications for hormonal contraception.
- 10. Osteoporosis diagnosis & management.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss differential diagnosis of clinical conditions associated with maculopapular rashes in children.
- 11. Short Notes:
  - a. Methicillin resistant streptococcus aureus
  - b. Congenital cataract
- 12. Short Notes:
  - a. Vitamin E and its role in human nutrition
  - b. Non nutritive sucking
- 13. Enumerate the functions of Vitamin D. Elaborate on the diagnosis and management of nutritional rickets.
- 14. Elaborate on bioactive factors in human milk.
- 15. Discuss the benefits and risks of bone marrow transplantation in children.
- 16. Management of child with Dengue Haemorrhagic Shock Syndrome.
- 17. Causes of failure to thrive in infancy.
- 18. Short Notes:
  - a) Vernal kerato conjunctivitis.
  - b) MMR Vaccine.
- 10. Discuss diagnosis and management of childhood asthma.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Principles of fluid therapy in neonates.
- 11. Acute laryngeal edema and treatment.
- 12. Anaesthesia management for ruptured ectopic in shock.
- 13. Effect of poisoning in an anaesthetized patient.
- 14. Aorto caval occlusion syndrome.
- 15. Advanced trauma life support.
- 16. Central neuraxial blockade in children, indications and complications.
- 17. Treatment of intraoperative severe hypertensions, causes and complications.
- 18. Anaesthesia management for liposuction in a morbidly obese patient.
- 10. Write briefly about assessing difficult airway and management.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss about the laboratory tests in a case of bleeding disorder.
- 11. Discuss in detail about laboratory diagnosis of Meningitis.
- 12. Discuss the role of laboratory tests in a case of Jaundice.
- 13. Describe semen analysis.
- 14. What are blood components? Write about their storage and indications.
- 15. Discuss myelodysplastic syndrome.
- 16. Describe the role of urine microscopy in diagnosis and prognosis.
- 17. Describe CSF analysis.
- 18. WHO classification of leukemia.
- Discuss the role of Pap smear in diagnosis and add a note on liquid based cytology.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the differential diagnosis of periorbital lesions.
- 11. Discuss the role of interventional radiologist in female infertility.
- 12. Describe the technique of Arch aortogram. Mention the indications and complications of aortogram.
- 13. Write short notes on:
  - a. Embolic materials.
  - b. MRI contrast
  - c. Splenic space occupying lesions.
  - d. Isotope findings in acute cholecystitis.
  - e. Pulmonary hydatid cyst.
- 14. Describe the radiological features of bronchogenic carcinoma.
- 15. Describe the radiological features of benign and malignant. lesions of small bowel.
- 16. Write short notes on:
  - a. MRCP.
  - b. Fetal MRI.
  - c. Ultrasound guided renal biopsy.
  - d. Cystic masses in adnexa.
  - e. Nasopharyngeal angioma.
- 17. Explain in detail anterior abdominal wall defects in fetus. Mention the imaging findings.
- 18. Mention the imaging findings in bleeding per vagina in first trimester.
- 10. Discuss the differential diagnosis of Rt. Iliac Fossa Mass.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Acute corpulmonale.
- 11. Management of small cell carcinoma of lung.
- 12. Management of adult respiratory distress syndrome.
- 13. Bronchiolitis obliterans with organizing pneumonia (BOOP).
- 14. Exercise induced asthma.
- 15. Beryllium lung.
- 16. Postoperative pneumonia.
- 17. Pulmonary hydatid disease.
- 18. Pulmonary manifestations of obesity.
- 10. Oxygen therapy in Chronic Obstructive Pulmonary Disease.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Write an essay on oncogenic DNA viruses.
- 11. Discuss the importance of speciation in candida.
- 12. Give an account of poliovirus.
- 13. Write an essay on Aspergillus species.
- 14. Write an essay on cryptococci.
- 15. Discuss the laboratory diagnosis of HIV / AIDS infection.
- 16. Describe Hepatitis B virus. Add a note on its laboratory diagnosis.
- 17. Write an essay on laboratory diagnosis of malaria.
- 18. Give an account of rabies prophylaxis.
- 10. Describe the life cycle and laboratory diagnosis of Hookworm.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the epidemiology of anaemia in adolescents and suggest measures to control it.
- 11. Discuss the strengths and weakness of ICDS scheme and suggest briefly the innovative measures to improve its function.
- 12. Air pollution indices.
- 13. Biogas plant.
- 14. Legal stipulation of hospital waste management in India.
- 15. Occupational hazards in radiation exposure and its preventive measures.
- 16. Mother craft clinics.
- 17. Birth control vaccine.
- 18. Describe in detail about the anti-rodent measures.
- 10. Discuss ergonomics.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Emergencies in Psychiatry.
- 11. Psychotropics in pregnancy and lactation.
- 12. Zotepine.
- 13. Family theories of Schizophrenia.
- 14. Panic attacks.
- 15.ECT
- 16. Anorexia nervosa.
- 17. Rapid tranquilization.
- 18. Psychosocial management of Schizophrenia.
- 10. Newer mood stabilizers.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 BIOCHEMISTRY

#### Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the mechanism of action and role of significance of Hormones in the regulation of carbohydrate metabolism.
- 11. Describe hormonal and nutritional regulation in case of dehydration.
- 12. Write briefly on:
  - a) Methyl-Malonyl aciduria
  - b) Histamine Fast Achlorhydria
  - c) Co-enzyme functions of Pyridoxal Phosphate
- 13. Nutritional and hormonal aspects of Diabetes Mellitus. Describe the common methods used to test Blood Glucose in the lab.
- 14. What is guanido-acetic acid? How is it synthesized in the body? Write the clinical aspects of the same.
- 15. Explain the hormones and their biochemical actions that regulate glycogen metabolism.
- 16. Describe Immunoglobulins.
- 17. Explain the functions of rods and cones Describe the pathological manifestations of Vitamin 'A'.
- 18. Oral contraceptives.
- 10. Explain:
  - a) Endorphins
  - b) Glyco-protein hormones
  - c) Significance of Hexose-mono-phosphate shunt.

#### 154-NR M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Incretins
- 20. Peroxidase inhibitors
- 21. Antipseudomonal antimicrobials
- 22. Fractionated heparins
- 23. Dihydrofolate reductase inhibitors
- 24. Cetuximab
- 25.2-mercaptoethanesulphonate
- 26. DOTS
- 27. Leuprolide
- 10. Enfuvirtide

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. How far volume and specific gravity play the role when the lungs of a newborn baby float and sink in water? Discuss Hydrostatic test.
- 11. Discuss various aspects of dying declaration and its implication in relation to dying deposition.
- 12. Describe, giving diagrams, how you find out distance from which a firearm has been fired.
- 13. Discus various hypotheses which have been put forward to explain the "Sudden Infant Death Syndrome".
- 14. Arrange incidence-wise the injuries sustained by the child in the "Battered Baby Syndrome", the most common to be at the top and least common at the bottom and explain.
- 15. Starting with preliminaries, explain all the methods adopted to do medico legal autopsy.
- 16. What do you mean by consumption of marriage? How far impotence interferes with this? Explain various causes of impotence.
- 17. How you explain various aspect of "Sexual Asphyxia" including the personality of the victim?
- 18. What are types of anoxia you know? Explain with examples.
- 10. Explain various causes of suffocation. How café-coronary differs from other forms of choking?

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Synaptic transmission.
- 20. Pathway for pain sensation.
- 21. Theories of colour vision.
- 22. Pheromones.
- 23. Pacemaker potential.
- 24. Irreversible shock.
- 25. Periodic breathing.
- 26. Neural regulation of respiration.
- 27. REM sleep.
- 10. Coronary blood flow.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the etiology of Gastric outlet obstruction in different age groups and discuss in detail about its management.
- 11. Staplers in General Surgery.
- 12. Classify small bowel tumours and discuss their management.
- 13. Anatomy of the oesophagus and its congenital anomalies.
- 14. Discuss the clinical features and management of hyperparathyroidism.
- 15. Write briefly the clinical features and management of spinabifida.
- 16. Classify tumours arising from lung. Write about oat cell carcinoma.
- 17. Discuss in detail about renal tumours. Write about Grawitz tumour.
- 18. Define hernia. Describe the types of hernia and discuss about spigelian hernia.
- 10. Discuss about deep vein thrombosis, its complications and management.

#### M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Principles of Tendon Transfer.
- 11. Developmental dysplasia of hip.
- 12. Recurrent dislocation of patella.
- 13. Compartmental syndrome.
- 14. Spondylolisthesis.
- 15. Cubitus varus.
- 16. Limb salvage procedures in bone tumors.
- 17. Triple arthrodesis.
- 18. Surgical containment of femoral head in Perthe's disease.
- 10. Mallet finger.

## M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Pathogenesis and management of thyroid exophthalmos.
- 11. Discuss Retinopathy of Prematurity and its management.
- 12. Aetiology and management of Oculomotor nerve palsy.
- 13. Vision 2020.
- 14. Aetiology, clinical features and management of Optic Neuritis.
- 15. How do you investigate a case of sudden visual loss in a man aged 50 years?
- 16. Management of a case of age related macular degeneration.
- 17. Management of vitreous haemorrhage.
- 18. Diagnosis and management of Neovascular glaucoma.
- 10. a) Malingering visual loss.
  - b) Vitreous substitutes.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss congenital anomalies of external ear and its management.
- 11. Discuss the causes, complications and management of CSF Rhinorrhoea.
- 12. Discuss post laryngectomy management.
- 13. Write clinical features and management of attic perforation.
- 14. What is microdebrider? Discuss its applications in ENT surgeries.
- 15. Discuss clinical features and management of acoustic neuro fibroma.
- 16. Discuss the possible surgical management for laryngopharyngeal malignancy.
- 17. Discuss in detail juvenile nasopharyngeal angiofibroma and its management.
- 18. Discuss the phonosurgical techniques in voice disorder management.
- 10. Rigid Oesophagoscopy Uses and its complications.

#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Multifactorial inheritance.
- 11. Microanatomy of adrenal gland.
- 12. Alizarin technique.
- 13. Population genetics.
- 14. Human Genomic Project and its application.
- 15. Microanatomy of cerebellum.
- 16. Various ethical issues involved in medical genetics.
- 17. Microtomes.
- 18. Histology of thymus.
- 10. Preparation of plastinated specimen.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Zidovudine
- 20. Eosinophilic folliculitis
- 21. Immune reconstitution syndrome
- 22. Window period
- 23. Secondary syphilis
- 24. Management of trophic ulcer
- 25. Thalidomide
- 26. Morphological index and bacteriological index
- 27. Claw hand
- 10. Prevention of mother to child transmission of AIDS

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103-NR

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss Chikungunya fever.
- 11. Tropical filarial pulmonary eosinophilia.
- 12. Streptococcal Shock Syndrome
- 13. Pathogenesis of malaria.
- 14. Anti viral chemo therapy except ART.
- 15. Pathogenesis and management of typhoid fever.
- 16. Clinical syndrome of actinomycosis.
- 17. Antimycobacterial agents.
- 18. Clinical manifestations of Leptospirosis
- 10. Rabies.

#### M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss about antihypertensives in pregnancy.
- 11. Laparotomy in septic abortion.
- 12. Steroid prophylaxis in pregnancy.
- 13. Caesarean hysterectomy.
- 14. Role of destructive operations in modern obstetrics.
- 15. Medical management of abnormal uterine bleeding.
- 16. Vacuum extraction.
- 17. Intrauterine insemination.
- 18. Sling operations for prolapse.
- 10. Complications following vaginal hysterectomy.

### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PAEDIATRICS

#### Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the diagnosis and management of complex partial seizures.
- 11. Discuss the clinical features, diagnosis and management of congenital aganglionic megacolon.
- 12. Discuss the etiology, clinical features, diagnosis and management of infective endocarditis.
- 13. Short notes:
  - a. Wilm's tumor
  - b. Mitochondrial Inheritance
- 14. Short notes:
  - a. Undescended testes
  - b. Oral chelation therapy
- 15. Causes and principles of management of end stage renal disease in children.
- 16. Etiology, laboratory diagnosis and management of metabolic acidosis in a 7 year old boy.
- 17. Short notes:
  - a) Gene therapy
  - b) Antioxidants
- 18. Complications of viral Hepatitis and management of fulminant Hepatitis.
- 10. Diagnosis of Neuro cutaneous syndromes.

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#### M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Write briefly about gestation diabetes and anaesthesia management for caesarian.
- 11. Post dural puncture headache and treatment.
- 12. Various steps to be taken to declare tetanus in post operative patient.
- 13. Treatment of fat embolism.
- 14. Management of anaesthesia for a patient with permanent pacemaker for trans urethral resection of prostate.
- 15. Initial management of a patient with head injury.
- 16. Balanced anaestheisa.
- 17. Plan of management for pain relief in a patient with trigeminal neuralgia.
- 18. Inverse ratio ventilation.
- 10. Recognition and treatment of thyroid storm.

## M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss recent advances in Bone marrow pathology.
- 11. Discuss recent criteria for the diagnosis of follicular carcinoma thyroid and related conditions.
- 12. Write about the clinical applications of flow-cytometry.
- 13. Artificial neural networks in diagnostic pathology.
- 14. Discuss about audits, quality assurance and quality control in histopathology.
- 15. Write about tissue arrays their construction and application.
- 16. Write about technical advances in histopathology.
- 17. Discuss about autologous blood stem cell transplantation.
- 18. Discuss molecular pathology of small round cell tumors.
- 10. Write about recent advances in endometrial pathology.

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# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the role of MRI in congenital anomalies of uterus.
- 11. Describe the CT imaging features of peritoneal diseases.
- 12. Explain in detail pseudopancreatic cyst.
- 13. Write short notes on:
  - a) Tissue harmonic imaging.
  - b) CT features of bronchiectasis
  - c) Lymphangiogram
  - d) Osteopetrosis
  - e) Hip ultrasound (Paediatric)
- 14. Describe the imaging features of arteriovenous malformations (AVM) of brain.

Add a note on interventional procedures available for AVM.

- 15. Describe the radiological features of metabolic bone disease.
- 16. Write briefly about percutaneous nephrostomy.
- 17. Write short notes on:
  - a) Kartagener's syndrome
  - b) Differential diagnosis of multiple cavities in lung.
  - c) TAPVD
  - d) Undescended testis
  - e) Chronic DVT
- 18. Mention the technique and indications for carotid doppler.
- 10. Differential diagnosis of posterior Fossa lesions in brain.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Environmental control of Tuberculosis.
- 11. Pulmonary complications in burns.
- 12. Bi level positive airway pressure ventilation.
- 13. Ventilator associated pneumonia.
- 14. Recombinant BCG vaccines.
- 15. Extensively Drug Resistant (XDR) Tuberculosis.
- 16. Shrinking lung syndrome.
- 17. Gene therapy in pulmonary diseases.
- 18. Prophylaxis of pulmonary thromboembolism.
- 10. Partial liquid ventilation.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 MICROBIOLOGY

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Give an account of slow virus infections.
- 11. Give an account of current trends in Helicobacter pylori research.
- 12. Write an essay on antibiotic policy for a tertiary care hospital.
- 13. Give an account of emerging and reemerging diseases.
- 14. Write an essay on CD4 Lymphocytes.
- 15. Give an account of recent advances in the diagnosis of viral infections other than tissue culture.
- 16. Write an essay on application of molecular biology for the study of medically important parasites.
- 17. Give an account of hospital infections and their prevention / control.
- 18. Discuss the laboratory diagnosis of suspected amoebic abscess.
- 10. Give an account of food microbiology.

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# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the Disability Act 1995 and role Community based rehabilitation in leprosy.
- 11. The Biological / Chemical weapons of warfare pose a major challenge to public health administration system. Describe the measures to be taken by a health administrator in case of such a situation.
- 12. Describe the sources of health information. Trace the evolution of survey as a source of state health information.
- 13. Local health authority.
- 14. Consumer Protection Act and health personnel.
- 15. The Medical Officer of a Primary Health Center is not only curative person, but a health manager justify and discuss the essence of the statement.
- 16. Critically analyze various public health losses in the context of improvement of health of people of our country.
- 17. Community psychiatry.
- 18. International Red Cross Society.
- 10. Critical Path Method (CPM) with example.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

## **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Remediations in specific learning disorder.
- 11. Female sexual dysfunctions.
- 12. Mental Health Act.
- 13. IDEAS.
- 14. Parent Management Training.
- 15. Type I and Type II errors.
- 16. Psychiatric aspects of organ donation.
- 17. Eric Erikson.
- 18. Cognitive behavioural therapy for delusional disorders.
- 10. Impact of Terrorism.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the advantages and disadvantages of both manual and modern biochemical investigation techniques.
- 11. How will you biochemically investigate a case of renal calculi?
- 12. Essay on Retroviruses.
- 13. What is the significance of GTT in diagnosis of pregnancy induced Diabetes? Write the confirmatory tests.
- 14. Investigation of a case of obstructive Jaundice.
- 15. Short notes on:
  - a. Mc Ardles disease
  - b. Hartnup's disease
  - c. Albinism
- 16. Describe malabsorption syndromes.
- 17. Synthesis, sources, biochemical functions and deficiency manifestations of Ascorbic acid.
- 18. Describe Continuous Flow Autoanalyzer, Automated Photometric analyser and discrete analyser.
- 10. Describe transmethylation reaction with special reference to Methionine.

Describe the importance of Sulphur in clinical chemistry.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011

#### PHARMACOLOGY

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Novel methods of drug delivery
- 11. Thalidomide
- 12. Drug therapy of multi drug resistant tuberculosis
- 13. Drug therapy of benign prostate hypertrophy
- 14. Treatment of insulin resistance
- 15. Interferons
- 16. Pharmacological role of calcineurin inhibitors
- 17. Rational and management of Warfarin over dosage
- 18. Principles of anti cancer drug combination
- 10. Treatment of hydatid cyst disease.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe in detail and with examples the principle of precipitin test.
  Mention the steps of procedure of this test.
- 11. Describe the basis of ABO Blood group system. What is the Blood Group of child when the mother is "A" and father is "B", the mother is "O" and father is "B", when both are "O"?
- 12. Site four examples which come under both the concepts of professional misconduct and professional negligence with presentation of the meaning of both the concepts.
- 13. How far curare resembles snake poisoning?
- 14. Describe sea-food poisoning with special reference to scombroid and ciguatera.
- 15. Define "Consent" and clarify by giving examples. Describe the interpretation of Sec. 87 and Sec. 89 IPCS.
- 16. Describe the civil and criminal responsibilities of an insane person. Apply the McNaughten Rule at suitable place.
- 17. How deliriant poisons differ from stimulants in mode of action? How both differ from inebriants in their mode of action?
- 18. In countries like USA, McNauthen Rule has been replaced. What is your suggestion for our country and why?
- 10. Explain the Doctrine of diminished responsibility. How far it is applicable in case of Psychopaths?

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Parkinson's disease
- 11. Neurotrophins and Neuromodulators
- 12. Hypothalamus
- 13. Conditioned reflexes
- 14. Memory
- 15. Reflex arc
- 16. Vestibular apparatus
- 17. Sleep apnea syndrome
- 18. EEG
- 10. Aphasia

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 GENERAL SURGERY

Paper-IV : General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Write the classification of burns, management of burns, recent advances in management of burns.
- 11. Write in detail the role of radionuclide in general surgery.
- 12. Discuss the palliative care in terminally ill patient.
- 13. Classify cysts of the pancreas. Write in detail about cystadenocarcinoma.
- 14. Classify jaw tumours. Write in detail about adamantinoma.
- 15. Write about clinical features, diagnosis and classification of Gall bladder carcinoma.
- 16. Discuss about etiology, clinical features and management of obstructive jaundice.
- 17. Discuss the role of laparoscopy in General Surgery.
- 18. Discuss about regional ileitis.
- 10. Discuss the assessment of operability of Gastric carcinoma, procedure of gastrectomy and its complications.

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Proximal femoral nail.
- 11. Bone transport
- 12. Intervertebral disk replacement
- 13. Shoulder arthroscopy
- 14. Bone cement
- 15. Immediate post operative prosthetic fitting
- 16. Revision hip arthroplasty
- 17. Biological fixation
- 18. Peri prosthetic fracture
- 10. Neo adjuvant chemotherapy.

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Implantable Contact Lens (ICL)
- 11. Collagen cross linking
- 12. Microphaco surgery
- 13. Famatosecond laser
- 14. Multifocal IOLs
- 15. Various modes of measuring corneal thickness
- 16. Newer modalities in Glaucoma surgery.
- 17. Descemet's Stripping Endothelial Keratoplasty (DSEK)
- 18. Orbital implants.
- 10. a) Scheimpflug imaging technique
  - b) Intravitreal Triamcinolone Acetonide

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#### 183-NR

# M.S. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Surgical Anatomy of Neck spaces and discuss management of neck space infection.
- 11. Discuss in detail, the possible orbital complications during FESS and its management.
- 12. Write an essay on Meniere's Syndrome
- 13. Discuss in detail Rehabilitation of voice following laryngectomy.
- 14. What is the value of detailed study of CT PNS-before doing FESS?
- 15. Management of Post laryngectomy fistula in neck.
- 16. Discuss in detail the causes and management of unilateral nasal bleeding in adult.
- 17. Discuss the aetiopathogenesis and management of subglottic stenosis.
- 18. Discuss the role of nasal endoscope in ear surgeries.
- 10. Discuss the management of cleft lip and cleft palate.

# M.D. DEGREE EXAMINATION – OCTOBER/NOVEMBER, 2011 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- **11.** Midgut loop rotation and errors of rotation.
- **12.** Components, connections and functions of Limbic system.
- **13.** Development of limbs and associated anomalies.
- **14.** Efferent pathways of parasympathetic system.
- **15.** Nuclei, connections and functions of Hypothalamus.
- **16.** External and internal structure of medulla oblongata and effects of lesion.
- **17.** Histogenesis of cerebral cortex and mechanism of cortical development.
- **18.** Ventricular system of brain and associated anomalies.
- **19.** Estimation of foetal age.
- **20.** Reticular formation of brain stem.

# M.D. DEGREE EXAMINATION - OCTOBER/NOVEMBER, 2011

D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Human papilloma virus vaccines
- 11. Henoch Schloein purpura
- 12. Autoimmune urticaria
- 13. Dermatomyositis and internal malignancy
- 14. Neonatal lupus erythematosus
- 15. Cutaneous mucinosis
- 16. Acute skin failure
- 17. Acanthosis nigricans
- 18. Erythema nodosum
- 10. Wegner's granulomatosis

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M.D. DEGREE EXAMINATION – APRIL, 2012

GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

# All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Pulmonary function tests.
- 2. Methods of analysis of human DNA.
- 3. Treatment and prevention of genetic disease.
- 4. Anorexia Nervosa.
- 5. Enteral nutrition.
- 6. Trace elements.
- 7. Obstructive sleep apnea syndrome.
- 8. Hemoptysis and approach to a patient with hemoptysis.
- 9. Approach to a patient with jaundice
- 10. Describe Iron metabolism.

# OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the various types of pelvis and its obstetric significance.
- 29. Lymphatic drainage of vulva.
- 30. Physiological changes in puerperium.
- 31. H.P.O axis in gynecology.
- 32. Iron metabolism.
- 33. Drugs for acute hypertension in pregnancy.
- 34. Critical analysis of ovulation induction drugs.
- 35. Asymptomatic bacteriuria.
- 36. Pap smear and its importance.
- 10. Pathology of choriocarcinoma.

## **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Pathogenesis of cerebral edema.
- 29. Factors regulating sodium homeostasis.
- 30. Life cycle of falciparum malarial parasite.
- 31. Loop diuretics and their mode of action.
- 32. Composition of surfactant and importance of each component.
- 33. Mechanism of thermoregulation in newborn
- 34. Importance of peripheral blood smear study in a child.
- 35. Third generation cephalosporins.
- 36. Polysaccharide vaccines.
- 10. Causes and pathophysiology of acidosis.

# M.D. DEGREE EXAMINATION – APRIL, 2012 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe coronary circulation and various factors that alter the blood flow in the coronary circulation.
- 29. Write about temperature regulation in children.
- 30. Write a note on Crawford Long.
- 31. Write about contents of soda lime and mechanism of absorption of carbon dioxide.
- 32. Discuss about bed side tests to predict difficult intubation.
- 33. Describe physiological principles of cardiopulmonary bypass.
- 34. Write a note on technique and mechanism of action of intravenous regional anaesthesia.
- 35. Write about capnography and its abnormal tracings.
- 36. Discuss the methods of intracranial pressure monitoring. Mention the uses and complications of intracranial pressure monitoring.
- 10. Describe Train-of-four stimulation and its intraoperative uses.

## **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe in detail about acute phase reactants.
- 29. Give the pathogenesis and morphological changes in diseases caused by alcohol abuse.
- 30. Enumerate cytoskeleton abnormalities.
- 31. Describe the endothelial cell in health and disease.
- 32. What are the types of RNA? Discuss micro RNA.
- 33. Describe the signal transduction pathways.
- 34. Discuss diet and cancer.
- 35. Discuss wound healing by secondary intention.
- 36. Describe telomeres.
- 37. Name the types of hypersensitivity reactions. Describe in detail anaphylactic reaction.

# M.D. DEGREE EXAMINATION – APRIL, 2012 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Enumerate the anatomical variants and congenital anomalies of the aorta, with a brief account of the imaging features.
- 29. Explain in detail the radiation protection followed in x-ray, Fluoroscopy and CT scan room.
- 30. Describe the various types of X-ray grids and their effect on image quality.
- 31. Describe the side effects of iodinated I.V contrast. How would you treat anaphylaxis?
- 32. What are the indications of Small bowel enema and how would you perform the procedure?
- 33. Describe the radiological features of Ankylosing Spondylitis.
- 34. Draw a labelled diagram of bronchopulmonary segments on a chest PA and lateral radiograph.
- 35. What are the factors influencing radiograph quality? Discuss the ways to improve the quality of a radiograph.
- 36. Plain X-ray findings in primary pulmonary tuberculosis.
- 37. Describe the types and imaging approach in Tracheo-esophageal fistula in an infant.

# M.D. DEGREE EXAMINATION – APRIL, 2012 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Role of Eosinophils in lung disease.
- 29. Diffusing Capacity (DLco).
- 30. Pulmonary surfactant.
- 31. "Silhouette Sign".
- 32. Respiratory Acidosis.
- 33. Pathophysiology of Hyperinflation.
- 34. Ground glass opacities in HRCT.
- 35. Mechanism of granuloma formation in tuberculosis.
- 36. Lung compliance.
- 10.Ultra structure of cilia.

# M.D. DEGREE EXAMINATION – APRIL, 2012 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Nobel Laureates in Microbiology.
- 29. Write an essay on Electron microscopy.
- 30. Automated systems in diagnostic microbiology.
- 31. Write an essay on bacterial nutrition.
- 32. Write an essay on mechanisms of drug resistance in bacteria.
- 33. Mechanisms of innate immunity.
- 34. Classify hypersensitivity. Write in detail mechanism of Type I hypersensitivity.
- 35. Complement in health and diseases.
- 36. Write in detail about HLA complex.
- 10. Write in detail about autoimmunity.

# M.D. DEGREE EXAMINATION – APRIL, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Write about social marketing in relation to F.W.P. of Indian.
- 29. Discuss the role of Indian life style factors in the major diseases challenging public health.
- 30. Describe the evolution of Public Health and Community Medicine.
- 31. Discuss demographic cycle with suitable example.
- 32. Discuss Community Diagnosis.
- 33. Discuss causes of malnutrition in India and strategy to control it.
- 34. Write briefly on monitoring on Nutrition status at National Level.
- 35. What are the barriers in Doctor-Patient communication?
- 36. Enumerate statistical test of significance. How they are useful in Research Methodology?
- 10. ABC, VED analysis.

# M.D. DEGREE EXAMINATION – APRIL, 2012 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Measures of central tendency.
- 29. Basal ganglia and their role in Psychiatry.
- 30. Assessing Disability and its relevance.
- 31. Incidence studies in Psychiatry.
- 32. Sleep architecture in normals and polysomnography in Psychiatry.
- 33. Systematic desensitization and its basis.
- 34. Short latency evoked potentials and their use in Psychiatry.
- 35. Informed consent in Psychiatric research.
- 36. Psychological concepts found in Indian philosophy.
- 10. Genetics of Depressive Disorder.

# M.D. DEGREE EXAMINATION – APRIL, 2012 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe the role of enzymes in analysis and manipulation of DNA.
- 29. Write an account of Spectrophotometry and Nephelometry.
- 30. Bisubstrate enzyme reactions.
- 31. Receptors with intrinsic protein kinase activity.
- 32. Agarose gel electrophoresis of DNA.
- 33. Describe the methods of detecting and quantifying radioactivity.
- 34. Describe the method of plotting Levey Jennings chart. Mention its applications.
- 35. Biosensors.
- 36. Blood buffers.
- 10. Active transport.

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Prodrugs and their clinical significance.
- 29. Dose response relationship.
- 30. Screening of a new molecule for anti-inflammatory activity.
- 31. Chi square test.
- 32. Apparent volume of drug distribution.
- 33. Preclinical toxicity studies.
- 34. Flame photometry.
- 35. Enzyme immunoassay.
- 36. Rational use of medicines.
- 10. Institutional ethics committee and its responsibilities.

#### FORENSIC MEDICINE

Paper-I : Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. How pelvic bone helps us in determining the age of an individual?
- 29. Discuss the medico legal importance of DNA finger printing.
- 30. Discuss the causes of anaphylactic shock leading to death.
- 31. Discuss in detail about the pathophysiology of heat stroke.
- 32. Advantage and disadvantage of the lie detection test.
- 33. Discuss the anatomical signs which help in determination of the maturity of the foetus.
- 34. Describe the entomology of maggot.
- 35. Clinical signs and pathological changes after death in a case of cardiac arrest.
- 36. Describe the process of Mummification.
- 10. Causes and medico legal importance of fracture neck of femur.

## **PHYSIOLOGY**

Paper-I: General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Resting membrane potential.
- 29. Evoked potential.
- 30. Myasthenia gravis.
- 31. Properties of nerve fibers.
- 32. Molecular basis of muscle contraction
- 33. Transcription.
- 34. Muscle proteins.
- 35. Starling's Law of muscle contraction
- 36. Measurement of body fluids.
- 10. Fatigue.

## **RADIOTHERAPY**

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe anatomy and Lymphatic drainage of Breast. Discuss the staging of Breast cancer.
- 2. CSF pathway.
- 3. Asymmetric jaws.
- 4. What factors determine the severity of normal tissue damage following irradiation?
- 5. Describe heavy particle beams with advantages and disadvantages over conventional photon beams.
- 6. Oncogenes.
- 7. Techniques used in screening of carcinoma cervix.
- 8. TLD
- 9. What is dose rate and how it effects on tumor.
- 10. Compensators in Radiotherapy.

# M.S. DEGREE EXAMINATION – APRIL, 2012 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Anatomy of pancreas.
- 29. Anatomy of breast
- 30. Describe the tests for AIDS (HIV).
- 31. Pathology of malignant Melanoma .
- 32. Nosocomial infections
- 33. Blood transfusion.
- 34. Renal function tests.
- 35. Regional Anaesthesia.
- 36. Insulin.
- 10. Acid base balance.

# **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Hallux-Valgus.
- 38. Boston-Brace.
- 39. Distraction-Osteogenesis.
- 40. Cauda-Equina syndrome.
- 41. Chondromalacia Patellae.
- 42. Osgood-Schlatter disease
- 43. Marble bone disease.
- 44. Sudeck's osteodystrophy.
- 45. Chordoma.
- 10. Pseudo-gout.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe the orbital and ocular venous drainage.
- 29. Discuss the physiology of lacrimal drainage.
- 30. Discuss the immunology of Uveitis.
- 31. Colour vision.
- 32. Describe the newer drugs in the treatment of open angle glaucoma.
- 33. Accommodation-convergence.
- 34. Low vision aids.
- 35. Describe the histopathology of malignant melanoma.
- 36. Describe the principle of non-contact tonometry.
- 37. Write short notes on:
  - a) Steroid pulse therapy
  - b) Antifungal drugs used in ophthalmology.

#### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe intra-temporal part of facial nerve and its branches with surgical and anatomical significance of this part of nerve.
- 29. Describe functions of Waldeyer's ring of lymphoid tissue and its role in immunological response of body.
- 30. Briefly describe surgical anatomy of fossa of Rosenmuller and its clinical importance.
- 31. Rhino-manometry.
- 32. Theories of phonation.
- 33. Discuss about anti-fungal antibiotics and also discuss about newer antifungals.
- 34. Branchial fistulae.
- 35. Chemotherapy in head and neck malignancy.
- 36. Bone conduction mechanisms in hearing.
- 10. PET scan.

#### ANATOMY

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Bony arches of foot and its clinical importance.
- 29. Femoral canal and its surgical importance.
- 30. The effect of brachial plexus injury at the Erb's point.
- 31. Bronchopulmonary segments and its surgical importance.
- 32. Achalasia cardia and its clinical importance.
- 33. Cryptorchidism (Incomplete descent of testis).
- 34. Peritoneal spaces around the liver and its clinical importance.
- 35. Mediastinal syndrome and its clinical importance.
- 36. Hemorrhoids and its surgical importance.
- 10. Gluteal muscles and their clinical importance.

## D.V.L.

# Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Lichenoid dermatitis
- 29. Dermo-epidermal junction
- 30. Toll-like receptors (TLR)
- 31. Percutaneous absorption.
- 32. Male urethra
- 33. Dermoscopy
- 34. Morphological index
- 35. Polymerase chain reaction (PCR)
- 36. Comedones
- 10. Epidermal kinetics

#### HOSPITAL ADMINISTRATION

Paper-I – General Administration and Management in Hospital field

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Management Art or Science?
- 2. Tows matrix
- 3. Barriers to communication
- 4. Job satisfaction.
- 5. Equity theory for motivation
- 6. Leadership path-goal theory
- 7. Break-even analysis
- 8. Economic Order Quantity (EOQ)
- 9. Decision tree analysis
- 10. Matrix organization in hospitals

#### **GENERAL MEDICINE**

Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Thrombocytopenia
- 20. Paraneoplastic syndromes.
- 21. Approach to a patient with polyarthritis.
- 22. Serologic markers of autoimmune hepatitis
- 23. Bone marrow transplantation.
- 24. Anti arrhythmic drugs for atrial fibrillation.
- 25. Approach to a patient in shock.
- 26. Cushing's syndrome.
- 27. Approach to lower GI bleed.
- 10. Gynecomastia.

### M.S. DEGREE EXAMINATION – APRIL, 2012 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Management of labour in case of pregnancy with anemia.
- 20. Prevention of parent to child transmission in HIV positive pregnancy.
- 21. What are the causes of over distended uterus? Write in detail about its complications.
- 22. Enumerate the causes of 1st trimester bleeding. How will you manage.
- 23. Post mature baby.
- 24. Birth injuries.
- 25. Diagnosis of HELLP syndrome and its management.
- 26. Discuss cervical dystocia and its treatment.
- 27. Teenage pregnancy and its complications.
- 10. Define deep transverse arrest and discuss its management.

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Clinical features, diagnosis and management of neonatal necrotizing enterocolitis.
- 29. Clinical features, diagnosis and treatment of Diaphragmatic hernia in a newborn.
- 30. Define neonatal mortality. Discuss causes of neonatal mortality in India.
- 31. Perinatal transmission of HIV infection and its prevention.
- 32. What is adoption? How do you evaluate a one month old baby for adoption?
- 33. Objectives and strategies of national ARI (Acute Respiratory Infections) control programme.
- 34. Assessment of physical growth and development in a 5 year old child.
- 35. Problems of adolescents and discuss in detail any one of them.
- 36. Management of severe Meconium aspiration syndrome.
- 37. Write short notes:
  - a. Temper tantrums
  - b. Play therapy.

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss about recent advances in delayed recovery and reversal of neuromuscular block.
- 20. Describe various methods of reducing intracranial pressure during surgery.
- 21. Discuss about methods of prevention of deep vein thrombosis and its management.
- 22. Describe modalities of pain relief in cancer patients.
- 23. Write a note on advanced life support.
- 24. Discuss intensive care management of a patient with septicemia and multiple organ failure.
- 25. Write a note on transesophageal echocardiogram.
- 26. Discuss about discharge criteria for outpatient procedures.
- 27. Describe the causes and treatment of intraoperative hyperkalemia.
- 28. Discuss the management of an unconscious patient with history of sea water drowning coming for intensive care unit.

# M.D. DEGREE EXAMINATION – APRIL, 2012 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the adenoma-carcinoma sequence in HNPCC.
- 20. Classify vasculitis. Discuss PAN.
- 21. Classify aggressive B cell NHLs and discuss any one of them.
- 22. Describe pathology of Alzheimer's disease.
- 23. Discuss the genetic syndromes associated with familial primary hyperparathyroidism and describe the cardinal features of primary hyperparathyroidism.
- 24. Describe granulomatous lesions in lung.
- 25. Histologic features of chronic hepatitis.
- 26. Rheumatoid arthritis Its pathogenesis and morphology.
- 27. Classify testicular tumors and discuss germ cell tumors.
- 10. Discuss placental site trophoblastic lesions.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 19. Enumerate the causes and describe the radiological features of hyperparathyroidism.
- 20. Describe the plain x-ray findings in raised intracranial pressure.
- 21. Discuss the differential diagnosis and imaging features of renal cystic disease.
- 22. Describe the ultrasonography findings in ovarian malignancy.
- 23. Discuss the radiological and imaging techniques in a fifty year male with haematuria.
- 24. Describe the causes and imaging investigations in a 25 yrs old patient with intracerebral haemorrhage.
- 25. Describe the anatomy of the cranio-vertebral junction. Discuss the role of imaging in basilar invagination.
- 26. Discuss the imaging evaluation of acute scrotal pain in a young male.
- 27. Describe the sonographic findings in abdominal tuberculosis.
- 10. Describe the imaging features of pulmonary sequestration.

#### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Sequelae of Pulmonary tuberculosis.
- 20. Landmarks in the development of tuberculosis chemotherapy.
- 21. Interferon-y Release Assays (IGRA) for TB diagnosis.
- 22. Immune Reconstitution Inflammatory Syndrome.
- 23. Rifabutin.
- 24. ATT induced hepatitis.
- 25. Stop TB Campaign.
- 26. "Collapse therapy" in pulmonary tuberculosis.
- 27. Walgreens time table.
- 10. Hematological manifestations of tuberculosis.

# M.D. DEGREE EXAMINATION – APRIL, 2012 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Write in detail about CAMP reaction.
- 20. Write in detail laboratory diagnosis of Enteric fever.
- 21. Classify Clostridia. Describe in detail Gas gangrene.
- 22. Write an essay on Halophilic vibrios.
- 23. Write essay on Genus Pseudomonas.
- 24. Non Tuberculous Mycobacteria.
- 25. Write an essay on nonspecific tests of syphilis.
- 26. Helicobacter pylori.
- 27. Classify Rickettsiae. Write an essay on spotted fever group.
- 10. Write an essay on Melioidosis.

# M.D. DEGREE EXAMINATION – APRIL, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Ecological trial its importance in public health.
- 20. Quality sputum microscopy.
- 21. Discuss the application of Clinical Epidemiology with suitable examples.
- 22. Herd Immunity.
- 23. VCT (Voluntary Counseling and Testing).
- 24. Discuss condom promotion.
- 25. Mention the burden of blindness in India. Discuss the strategies to control preventable blindness.
- 26. "Elimination of Leprosy as public health problem in India by 2010" Analyze the statement and discuss the measures to cope with it.
- 27. Prevention of strokes in the Young.
- 28. Trace the epidemiological picture of malaria till date. Outline the role of molecular epidemiology in the control of malaria.

## M.D. DEGREE EXAMINATION – APRIL, 2012 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Metabolic syndrome in psychoses.
- 20. Psychiatric presentations in intracranial space occupying lesions.
- 21. Non-epileptic uses of anticonvulsants.
- 22. Premenstrual syndrome.
- 23. Sexual dysfunction with psychotropic drugs.
- 24. Counseling the terminally ill.
- 25. Vascular dementia.
- 26. EEG in psychiatric practice.
- 27. Neuroleptic malignant syndrome.
- 10. Psychiatric complications in Parkinson's disease.

### M.D. DEGREE EXAMINATION – APRIL, 2012 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Determination of amino acid sequence of proteins.
- 20. Coenzymes.
- 21. Structural polysaccharides.
- 22. Amino acid pool.
- 23. Ketone body formation and utilization.
- 24. G proteins-structure and function.
- 25. Telomeres and Telomerases.
- 26. Protein misfolding.
- 27. Metabolism of fructose and associated disorders.
- 10. Degradation of sphingolipids.

#### **PHARMACOLOGY**

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Summarize the pharmacodynamics of nitrates in angina.
- 29. Non cardiovascular uses of beta blockers.
- 30. Summarize the sites of action with examples of drugs modulating cholinergic neurotransmission.
- 31. Complications of diuretic therapy.
- 32. Alcohol de-addiction.
- 33. Z compounds.
- 34. Pharmacotherapy of acute left ventricular failure.
- 35. Adenosine.
- 36. Tardive dyskinesia.
- 10. Vaptans.

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the pathophysiology of Ischemic heart disease.
- 29. Discuss the pathology of Berry aneurysm.
- 30. Pathology of cerebral oedema and its complications.
- 31. How will you justify pyaemia as the cause of death at postmortem examination?
- 32. Discuss the medico legal importance of burns.
- 33. Discuss the toxic effects of drugs in pregnancy.
- 34. Discuss the hazards of penicillin toxicity.
- 35. Discuss the microbiological investigations in a case of crush injury of femur.
- 36. Discus the pathophysiology of peritonitis.
- 37. What are the microbiological investigations to be done in a case of cerebral malaria?

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Plasma proteins.
- 29. Blood group systems.
- 30. Deglutition.
- 31. Gastrointestinal hormones.
- 32. Erythroblastosis foetalis.
- 33. Menstrual cycle.
- 34. Hypothalamo hypophysial axis.
- 35. Lactation.
- 36. Counter current mechanism.
- 10. Glucose reabsorption in the kidney.

#### **RADIOTHERAPY**

Paper-II: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Classify bone tumours and discuss the management of localized Ewing's sarcoma.
- 2. Mapping of Nodal station in Head-Neck Clinical and Radiological.
- 3. Rationale of Chemo-irradiation in cancer.
- 4. Phase 0 (zero) trial.
- 5. Percentage depth dose and Dmax.
- 6. Tissue compensator Vs Bolus.
- 7. What is plan implementation and verification in RT Planning?
- 8. Describe Stereotactic irradiation: Goal and principles.
- 9. Rationale IORT (intra-operative radiotherapy).
- 10. Describe abdominal radiotherapy and moving strip techniques.

# M.S. DEGREE EXAMINATION – APRIL, 2012 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Clinical features and the management of compound fracture of femur.
- 20. Classify groin hernias. Discuss the clinical features and management. Mention the complications.
- 21. Classify the lymph node swelling of the neck. Describe the pathology and management of tuberculous lymphadenitis.
- 22. Describe the aetiology, clinical features and management of hydronephrosis.
- 23. Discuss irritable bowl syndrome.
- 24. Write briefly the clinical features and management of cyanotic congenital heart disease.
- 25. Discuss tumours of adrenal medulla.
- 26. Describe aetiology, pathology, clinical features and treatment of carcinoma penis.
- 27. Describe the clinical feature and management of medial semilunar cartilage tear.
- 10. Discuss the hazards of incomplete descent of testis.

# M.S. DEGREE EXAMINATION – APRIL, 2012 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 28. Flail chest.
- 29. Non-union of scaphoid fractures.
- 30. Minimally invasive plate osteosynthesis.
- 31. Gun-stock deformity.
- 32. Acute respiratory distress syndrome.
- 33. Acute atlanto-axial dislocation.
- 34. Volar-Barton's fracture.
- 35. Surgical management of tibial plateau fractures.
- 36. Fractures of the distal end of humerus.
- 10. Pelvic fracture management.

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# M.S. DEGREE EXAMINATION – APRIL, 2012 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Management of persistent epithelial defect.
- 20. Pre perimetric glaucoma diagnosis.
- 21. Write on diabetic maculopathy.
- 22. Ocular manifestations of tuberculosis.
- 23. Diagnosis and management of blowout fracture.
- 24. Clinical presentation, diagnosis and management of central serous retinopathy.
- 25. Discuss the etiopathology of pseudophakic bullous keratopathy.
- 26. Management of congenital ptosis.
- 27. Ocular manifestations of Vitamin A deficiency.
- 28. Write short notes:
  - a) Glaucoma valves
  - b) B-scan

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# M.S. DEGREE EXAMINATION – APRIL, 2012 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the pathogenesis, clinical features and management of glomus tumor.
- 20. Describe the pathology, clinical features and management of Plummer-Vinson syndrome.
- 21. Describe the pathogenesis of squamous cell carcinoma.
- 22. Discuss the pathology, clinical features and management of inverted papilloma.
- 23. Achalasia cardia.
- 24. Discuss the etiopathogenesis, clinical features and management of submucous fibrosis.
- 25. Malignant otitis externa.
- 26. Sudden sensorineural hearing loss.
- 27. Discuss about the differential diagnosis of granulomatous diseases of nose.
- 10. Blowout fracture.

# M.D. DEGREE EXAMINATION – APRIL, 2012 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Gross anatomy of tongue.
- 29. Right atrium of the heart.
- 30. Anal canal.
- 31. Cubital space.
- 32. Hip joint.
- 33. Name dural venous sinuses and briefly explain cavernous sinus.
- 34. Arch of aorta
- 35. Extra hepatic biliary apparatus
- 36. Pronation and supination.
- 10. Sciatic nerve.

#### D.V.L.

#### Paper-II

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Onycholysis.
- 20. Tinea imbricata.
- 21. Acute generalized exanthematous pustulosis.
- 22. Keratosis lichenoides chronica.
- 23. Anagen effluvium.
- 24. Epidermolysis bullosa acquisita.
- 25. Syringoma.
- 26. Blue nevus.
- 27. Keratoacanthoma.
- 10. Botox in Dermatology.

#### HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Mudaliar committee
- 2. Revised national tuberculosis control programme
- 3. Cohort study
- 4. Epidemiology of Diabetes Mellitus.
- 5. Sampling methods
- 6. Investigation of an epidemic
- 7. Probability distribution
- 8. Present status of NRHM
- 9. Six sigma concept
- 10. Medical audit

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Acute respiratory failure.
- 20. Non functioning pituitary mass.
- 21. Approach to a patient with Proteinuria.
- 22. Hyponatremia.
- 23. Approach to a patient with stroke.
- 24. Psoriasis.
- 25. Paracetamol poisoning.
- 26. Management of Parkinsonism.
- 27. Diagnosis of bacterial endocarditis.
- 10. Heat stroke.

### M.D. DEGREE EXAMINATION – APRIL, 2012 OBSTETRICS & GYNAECOLOGY Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the role of Doppler Ultrasound in gynaecology.
- 20. Critically evaluate the screening procedures in ovarian cancers.
- 21. Problem of pseudomyxoma peritonei.
- 22. What is Asherman's syndrome? Discuss the causes and treatment.
- 23. Management of Nulliparous prolapse uterus.
- 24. The chlamydial infections and its significance in infertility.
- 25. Discuss the various causes of low back ache and its management.
- 26. Postpartum contraception.
- 27. Non-scalpel vasectomy.
- 10. Discuss the etiology, classification and diagnosis of V.V.F.

# M.D. DEGREE EXAMINATION – APRIL, 2012 PAEDIATRICS

# Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Kawasaki disease Clinical presentation, diagnosis and treatment.
- 20. Advantages of breast milk.
- 21. Hemorrhagic fevers in children.
- 22. Discuss the role of zinc in health and disease in paediatric practice.
- 23. Discuss the management of a child with persistent diarrhea.
- 24. Clinical importance of interferon.
- 25. Short notes:
  - a. Hypervitaminosis in children
  - b. Intrinsic factor.
- 26. Management of a child born to HBs Ag positive mother.
- 27. Nutritional requirements of pre-term baby.
- 10. Role of intravenous immunoglobulins in pediatric practice.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the anaesthetic problems of 8 years baby of Down syndrome coming for multiple teeth extraction.
- 20. Discuss the anaesthetic management of post renal transplant patient coming for emergency Laparotomy.
- 21. Discuss the hazards of general anaesthesia in a smoker.
- 22. Describe the problems of monitoring an anaesthetized patient in magnetic resonance imaging room.
- 23. Describe anaesthetic considerations in a patient of broncho pleural fistula repair surgery.
- 24. Discuss about low flow anaesthesia, its advantages and complications.
- 25. Discuss about the occupational hazards for the practicing anesthesiologists.
- 26. Write a note on caudal block in children.
- 27. Discuss the anaesthetic problems and management of young thyrotoxic patient posted for subtotal thyroidectomy.
- 28. Describe the anaesthetic management of patient having recent myocardial infarction posted for emergency laparotomy.

### M.D. DEGREE EXAMINATION – APRIL, 2012 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss etiopathogenesis and lab evaluation of hyperbilirubinemia.
- 20. Sputum examination in the screening and diagnosis of pulmonary lesions.
- 21. Discuss minimal residual disease.
- 22. Discuss Von Willebrand disease.
- 23. Discuss the biochemical basis of megaloblastic anemia.
- 24. Lab evaluation of ascitic fluid.
- 25. Lab investigation in case of hematuria.
- 26. Discuss Heparin induced thrombocytopenia.
- 27. Discuss the role of FNAC in granulomatous lesions of lymph nodes.
- 28. Clinical and genetic classification of Thalassemias and lab diagnosis of  $\beta$ -Thalassemia Major.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Enumerate the causes and discuss the differential diagnosis in a patient presenting with unilateral exophthalmos.
- 20. Discuss the role of interventional radiology in management of uterine fibroids.
- 21. Discuss the classification and imaging features of Dissection of aorta.
- 22. Enumerate and discuss the role of embolic agents in vascular radiology.
- 23. Describe the imaging protocol of Computed tomography (CT) angiography and imaging findings in pulmonary embolism.
- 24. Describe the role of imaging in gastrointestinal (GI) tract lymphoma.
- 25. Describe the role of Doppler ultrasound in intrauterine growth retardation (IUGR).
- 26. How will you investigate a neonate presenting with jaundice.
- 27. Discuss the role of MRI in Gynaecologic malignancies.
- 28. Describe the role of ultrasonography in evaluation of developmental dysplasia of the hip.

### M.D. DEGREE EXAMINATION – APRIL, 2012 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Paraneoplastic syndromes.
- 20. Pirfenidone.
- 21. Non resolving pneumonia.
- 22. Systematic manifestations of COPD.
- 23. Allergic bronchopulmonary aspergillosis.
- 24. Inflammatory mediators in asthma.
- 25. Pulmonary manifestations of Systemic lupus erythematosus.
- 26. High-flow oxygen delivery systems.
- 27. Diagnosis of Obstructive sleep apnea syndrome.
- 28. Solitary Pulmonary Nodule (SPN) Definition and differences between benign and malignant SPN.

# M.D. DEGREE EXAMINATION – APRIL, 2012 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Write in detail about culture of viruses.
- 20. Write an essay on interferons.
- 21. Classify Picornaviridae. Describe in detail Poliomyelitis. Add a note on pulse polio.
- 22. Describe the morphology, pathogenesis and laboratory diagnosis of Rabies.
- 23. Free living Amoebae.
- 24. Name the Protozoal Flagellates. Describe in detail kala azar.
- 25. Classify Nematodes. Write the morphology, life cycle and laboratory diagnosis of Wuchereria Bancrofti.
- 26. Write an essay on Larva migrans.
- 27. Classify Dermatophytes. Describe briefly pathogenesis and laboratory diagnosis of Ringworm infections.
- 10. Dimorphic fungi.

# M.D. DEGREE EXAMINATION – APRIL, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the strategies under rural health mission. Critically comment about its merits and demerits.
- 20. Integrated management of childhood illness.
- 21. What are the health and social problems associated with old age? Discuss the role of voluntary organization providing geriatric services.
- 22. Child vaccine initiative.
- 23. Benefits of employer under ESI scheme.
- 24. Risk approach in MCH care managerial tool.
- 25. Community based rehabilitation.
- 26. Post coital contraception.
- 27. Prevention of sickness absenteeism.
- 10. No scalpel vasectomy.

# M.D. DEGREE EXAMINATION – APRIL, 2012 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Biofeedback for therapeutic application.
- 20. Psychosocial issues in Disaster afflicted population.
- 21. Psychosocial disturbances in mentally handicapped children.
- 22. Catatonia, its concept and management.
- 23. Somatoform disorders.
- 24. Erectile Dysfunction
- 25. Social cognition in Schizophrenia.
- 26. Early intervention in psychosis: challenges and benefits.
- 27. Second generation antipsychotics.
- 10. Course and outcome of OCD.

### M.D. DEGREE EXAMINATION – APRIL, 2012 BIOCHEMISTRY

### Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe the mechanism of action of peptide hormones.
- 20. Describe the biochemical approach to investigate subfertility in the man.
- 21. Synacthen test
- 22. Biochemical diagnosis of pheochromocytoma.
- 23. Role of vitamins as antioxidants.
- 24. Deficiency manifestations of Zinc.
- 25. Markers of bone resorption.
- 26. Endocrine functions of placenta.
- 27. Role of hormones in the regulation of enzyme activity.
- 10. Metabolic changes in Type I diabetes mellitus.

### 154-NR M.S. DEGREE EXAMINATION – APRIL, 2012 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Aromatase inhibitors
- 29. Bisphosphonates
- 30. Pharmacotherapy of anaerobic infections
- 31. Dabigatran
- 32. Beta-lactamase inhibitors
- 33. Zanamivir
- 34. Androgen receptor antagonists
- 35. Ezetimibe
- 36. Sodium glucose co-transporter inhibitors
- 10. Tyrosine kinase inhibitors

# M.D. DEGREE EXAMINATION – APRIL, 2012 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Differentiate between human and animal hair.
- 20. Doctor in the witness box.
- 21. Define negative autopsy and its causes.
- 22. Discuss bomb blast injuries.
- 23. Describe shot gun cartridge.
- 24. Define exhumation and its medico legal importance.
- 25. Postmortem findings in a case of drowning.
- 26. Postmortem findings in a case of death due to starvation.
- 27. Differentiate between throttling and strangulation.
- 10. Importance of semen analysis.

### M.D. DEGREE EXAMINATION – APRIL, 2012 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Sensory receptors.
- 29. Hemisection of spinal cord.
- 30. Dr. B.K. Anand's contribution to physiology.
- 31. Sino-aortic mechanism.
- 32. Mechanics of breathing.
- 33. Lung volumes and capacities.
- 34. Pathway for accommodation reflex.
- 35. Mechanism of hearing.
- 36. Excitatory and Inhibitory neurotransmitters.
- 10. Rhodopsin cycle.

### M.D. DEGREE EXAMINATION – APRIL, 2012 RADIOTHERAPY

Paper-III: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Permanent implantation.
- 2. Nasopharyngeal Brachytherapy.
- 3. Classify tumors of CNS. How do you manage a patient with Medulla blastoma?
- 4. Invasive Thymoma.
- 5. Stage Migration.
- 6. Second primary malignant tumors.
- 7. Discuss the role of PET scan in oncology.
- 8. Discuss the management of Hemangiopericytoma.
- 9. Angiogenesis and Radiotherapy.
- 10. Explain volume effect in Radiotherapy.

### M.S. DEGREE EXAMINATION – APRIL, 2012 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Classify head injuries and describe the mechanism and pathology, clinical features and management of traumatic intracranial haemorrhage.
- 20. Classify salivary gland tumours. Describe the clinical features and management of benign salivary gland tumours.
- 21. Classify inflammatory conditions of the thyroid gland and discuss the management of Hashimoto's thyroiditis.
- 22. Discuss post operative pulmonary complications.
- 23. Discuss carcinoma of oesophagus.
- 24. Discuss rupture of spleen.
- 25. Choledochus cyst.
- 26. Classify mesentric cysts. Describe its clinical features and management.
- 27. Discuss the blind loop syndrome.
- 10. Discuss faecal fistula.

# M.S. DEGREE EXAMINATION – APRIL, 2012 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Synovial chondromatosis.
- 20. Chondrosarcoma.
- 21. Adolescent coxa-vara.
- 22. Septic arthritis of hip in infancy.
- 23. Causes and management of foot drop.
- 24. Osteogenesis imperfecta.
- 25. Kienböck's disease.
- 26. Neuropathic joint of knee.
- 27. Rotator cuff injury.
- 10. Chondro diastasis.

### M.S. DEGREE EXAMINATION – APRIL, 2012 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. How will you investigate a 45 year old female who has had painful sudden loss of vision in one eye?
- 20. Discuss the ocular signs in thyroid disease.
- 21. Describe the systemic associations of panuveitis.
- 22. Describe the principles of various operations done for ptosis.
- 23. Ocular manifestations of high altitude.
- 24. Describe the various etiological causes of horizontal gaze abnormalities.
- 25. Describe the various risk factors in age related cataracts.
- 26. How will you investigate unilateral proptosis in a 3 year old child?
- 27. Management of ectropion lower lid.
- 28. Write shot notes:
  - a) Post operative complications of silicon oil.
  - b) Secondary IOL

#### M.D. DEGREE EXAMINATION – APRIL, 2012 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss about the management of sleep apnoea syndrome.
- 20. Interpretation of BERA test.
- 21. Otitic hydrocephalus.
- 22. Classify fungal sinusitis. Discuss the management of fungal sinusitis.
- 23. Discuss about the management of  $N_0$  neck.
- 24. ENT manifestations of HIV.
- 25. Oroantral fistula.
- 26. Discuss clinical features and management in acoustic neuroma.
- 27. Reinke's edema.
- 10. Eustachian tube function tests.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Histology of compact bone.
- 20. Klinefelter syndrome.
- 21. Describe briefly the technique used for the study of chromosome.
- 22. Describe the procedure for preparation of a histological slide from paraffin block up to haemtoxylin and eosin stain.
- 23. M.R.I (Magnetic Resonance Imaging).
- 24. Histological changes of urinary tract.
- 25. Genetic counselling.
- 26. Merits and demerits of freezing microtome.
- 27. Describe briefly the technique for preparation of museum specimens.
- 10. Anaphase lag.

### M.D. DEGREE EXAMINATION – APRIL, 2012 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Pearly penile papules
- 29. Non venereal genital ulcerations
- 30. Tissue smears
- 31. Bacterial vaginosis
- 32. Pulmonary involvement in AIDS
- 33. Serodiagnosis in Leprosy
- 34. Disability grading in Leprosy
- 35. Ocular Leprosy
- 36. Quiet nerve paralysis
- 10. Vaccine trials in Leprosy

# M.D. DEGREE EXAMINATION – APRIL, 2012 HOSPITAL ADMINISTRATION

#### Paper-III – Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Nurse patient relation
- 11. Changing role of hospital administrator
- 12. Consumer relations management
- 13. Risk management in hospitals.
- 14. Disaster management during earthquake
- 15. Accreditation of hospitals
- 16. End-of-life care
- 17. Re-engineering in health care
- 18. Operational planning for a hospital
- 10. Medical insurance

#### M.D. DEGREE EXAMINATION – APRIL, 2012 GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss Dengue fever.
- 20. Clinical manifestation of Acinetobacter infection.
- 21. Technique and interpretation of measurement of CD4 cell count in HIV infected patient.
- 22. Approach to a patient with eosinophilia.
- 23. Clinical spectrum of HSV infection.
- 24. Cholera.
- 25. Anaerobic infections.
- 26. Non tuberculous mycobacteria.
- 27. Diagnostic approach to Leptospirosis
- 10. Anti retroviral therapy.

#### M.S. DEGREE EXAMINATION – APRIL, 2012

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Prevention of ureteric injuries in obstetrics and gynaecology.
- 20. Conservative surgical management of ectopic pregnancy.
- 21. Cone biopsy Discuss the procedure and complications.
- 22. Effects of SLE on pregnancy.
- 23. Various ART procedures in infertility and its applications.
- 24. Role of Heparin in pregnancy.
- 25. What is triple screening? Discuss its indications in obstetrics.
- 26. Anti retroviral therapy in HIV.
- 27. Place of chemotherapy in carcinoma cervix.
- 10. Antisperm antibodies.

# M.D. DEGREE EXAMINATION – APRIL, 2012 PAEDIATRICS

Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the causes, management and prevention of childhood hemiplegia.
- 20. DOTS chemotherapeutic management of tuberculosis in National Tuberculosis control program.
- 21. Different types of lymphomas in children and their histopathological classification.
- 22. Discuss approach to a child with acute congestive heart failure.
- 23. Short notes:
  - a. High frequency ventilation
  - b. Toxic shock syndrome
- 24. Management of steroid resistant nephrotic syndrome.
- 25. Management of acute osteomyelitis in an infant.
- 26. Short notes:
  - a) HLA markers in rheumatoid arthritis
  - b) Immunological deficiencies in PEM
- 27. Clinical features, diagnosis and management of cerebral malaria.
- 10. Ambiguous genitalia management.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the anaesthetic management and preparation of a diabetic patient posted for emergency Laparotomy having ketone bodies in urine.
- 20. Discuss various causes of intra operative hypertension and its management.
- 21. Describe the anaesthetic management of a post burn patient posted for contracture release in the neck.
- 22. Discuss various methods of prevention of infection in the intensive care unit.
- 23. Write a note on anaesthetic problems in a patient posted for laparotomy having Cushing syndrome.
- 24. Write a note on dissociative anaesthesia.
- 25. Discuss the anaesthetic considerations in eclampsia.
- 26. Discuss the pre operative evaluation of mitral stenosis patient posted for medical termination of pregnancy and sterilization.
- 27. Describe the anaesthetic management of a fracture neck femur patient posted for surgery, had coronary bypass graft six months back.
- 10. Discuss the criteria and neurological tests for diagnosis of brain death.

### M.D. DEGREE EXAMINATION – APRIL, 2012 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss telepathology.
- 20. Describe the applications of stem cell therapy.
- 21. Discuss bioterrorism.
- 22. Sudden infant death syndrome.
- 23. Discuss principle and application of chemiluminescence.
- 24. Discuss the concept of EMT (epithelial-mesenchymal transition).
- 25. Discuss Nanotechnology.
- 26. Comment on vaccine development in carcinoma cervix.
- 27. Discuss the role of fluorescence in situ hybridization (FISH) in pathology.
- 10. Comment on quality control in Immunohistochemistry.

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#### M.D. DEGREE EXAMINATION – APRIL, 2012 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the role of imaging in surgical obstructive jaundice.
- 20. Enumerate the causes and imaging features in Pseudomyxoma peritonei.
- 21. Describe the role of scintigraphy in evaluation of Gastro-intestinal bleeding.
- 22. What are the applications of MR spectroscopy in the evaluation of various intracranial lesions?
- 23. Describe the role of scintigraphy in cardiac imaging with emphasis on myocardial perfusion and viability.
- 24. Describe the role of HRCT in diffuse pulmonary lung disease.
- 25. Enumerate various causes of Supra-sellar masses. Describe imaging features in Craniopharyngioma.
- 26. Discuss the role of Doppler ultrasound in evaluation of varicose veins.
- 27. Discuss the radiological approach in a suspected case of subarachnoid haemorrhage.
- 28. Enumerate different varieties of osteosarcoma. Discuss their imaging features.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Sublingual immunotherapy.
- 20. PET scan in respiratory diseases.
- 21. Emerging Newer Pulmonary Infections.
- 22. Exhaled nitric oxide (FeNO).
- 23. Newer TB vaccines.
- 24. Electromagnetic Navigation Bronchoscopy (ENB).
- 25. Newer (GOLD 2011) classification system for COPD.
- 26. Pulmonary Barotrauma.
- 27. SMART therapy in Asthma.
- 10. Key-hole thoracic surgery.

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Immunotherapy of cancer.
- 20. ESBL (Extended Spectrum β lactamases).
- 21. Write an essay on viral vaccines.
- 22. Write an essay on hospital waste management.
- 23. Recent trends in malarial vaccines.
- 24. Write an essay on slow viral diseases.
- 25. Strategy of Antimicrobial chemotherapy.
- 26. Write an essay on safety in Microbiology laboratory.
- 27. Write an essay on bacteriological examination of air.
- 10. HACEK group of bacteria.

# M.D. DEGREE EXAMINATION – APRIL, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the influence of various health committees in the development of present health care system in our country.
- 20. Role of voluntary health organizations in the control of HIV/AIDS.
- 21. Discuss the ways and means of securing community participation at primary health center level.
- 22. Describe the salient points of millennium development goals.
- 23. Public private partnership.
- 24. Cost benefit analysis in health programmes.
- 25. WHO theme 2006.
- 26. International health regulation.
- 27. Where is Alma Ata? Critically analyze and discuss the present position of health for all goals by 2000 AD set at Alma Ata declaration.
- 28. Discuss the standard modes of health education in a tribal setting.

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Vagal nerve stimulation in Psychiatry.
- 20. Inhalant drug abuse.
- 21. Genetics of Alzheimer's disease.
- 22. Use of PET scanning in psychiatry research.
- 23. Therapeutic drug level monitoring in psychiatry.
- 24. Behaviour therapy for male sexual dysfunction.
- 25. Anorexia Nervosa in adolescents.
- 26. Primary Nocturnal enuresis.
- 27. Meditation as a psychiatric treatment.
- 10. Heart rate variability studies in psychiatry.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Define 'point of care testing". Describe its scope, methodology, advantages and disadvantages.
- 20. Describe the role of fluid and electrolyte measurement in the management of seriously ill patient.
- 21. Discuss the biochemical investigations to assess (a) the glomerular functions and (b) the tubular functions.
- 22. Name five specific proteins that are measured in serum and mention their significance.
- 23. Name the cardiac markers and describe their role in the diagnosis and management of myocardial infarction.
- 24. Define 'hypoglycemia'. Describe the causes, clinical effects and assessment of fasting hypoglycemia, reactive hypoglycemia and neonatal hypoglycemia.
- 25. Multiple endocrine neoplasia.
- 26. Restriction fragment length polymorphism.
- 27. Describe the laboratory tests to assess the gastrointestinal function.
- 10. Porphyrias.

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### PHARMACOLOGY

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Drug use in pediatric population
- 20. Post exposure prophylaxis against HIV infection
- 21. Drug therapy of chloroquine resistant malaria
- 22. Drug therapy of erectile dysfunction
- 23. Treatment of thyroid storm
- 24. Biological response modifiers
- 25. Post coital contraception
- 26. Rationale and management of haemorrhagic stroke
- 27. Antimicrobial drug resistance
- 10. Nitazoxanide.

# M.D. DEGREE EXAMINATION – APRIL, 2012 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the functions of Indian Medical council.
- 20. Discuss the therapeutic misadventure with examples.
- 21. Explain about informed consent.
- 22. Discuss the types of Hallucinations.
- 23. Describe the metabolism of Ethyl Alcohol.
- 24. Breath analyzer and its uses in Forensic Medicine.
- 25. Symptoms of carbon monoxide poisoning.
- 26. Section 84 of IPC.
- 27. Datura poisoning and its medico legal importance.
- 10. Describe Psychological autopsy.

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Referred pain
- 20. Heat stroke
- 21. Second messengers
- 22. Negative and positive feedback mechanisms
- 23. Cushing's syndrome
- 24. Taste pathway
- 25. Pineal gland
- 26. Tests for pregnancy
- 27. Echo-radiography
- 10. Color blindness

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### RADIOTHERAPY

Paper-IV: Clinical subjects in relation to Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. KPS
- 2. BMT (Bone marrow transplantation) and radiotherapy
- 3. Advantages of TNM staging
- 4. Radiation Proctitis and its management
- 5. Define "Palliative Care". What are its main aims and how is it achieved?
- 6. Write notes on Maximum Permissible Dose and the principle of ALARA
- 7. TPN
- 8. Tumor Lysis syndrome
- 9. Types of IMRT and inverse planning
- 10. Capecitabine

#### M.S. DEGREE EXAMINATION – APRIL, 2012 GENERAL SURGERY

Paper-IV: General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss total pancreatoduodenectomy for cancer of the pancreas.
- 20. Discuss upper gastrointestinal haemorrhage.
- 21. Discuss salivary fistulae.
- 22. Discuss cryo surgery.
- 23. Discuss inflammations of the breast.
- 24. Discuss portal hypertension.
- 25. Discuss biliary fistulae.
- 26. Discuss lump in the right iliac fossa.
- 27. Discuss acute intestinal obstruction of the newborn.
- 10. Stem cell.

# M.S. DEGREE EXAMINATION – APRIL, 2012 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Bone bank.
- 20. High tibial osteotomy
- 21. ACL rupture
- 22. Neurogenic bladder
- 23. Proximal femoral nail
- 24. SACH foot
- 25. Bone substitutes
- 26. Less invasive stabilization system
- 27. Ultrasound in Orthopaedics
- 10. Gait cycle.

#### M.S. DEGREE EXAMINATION – APRIL, 2012 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Role of Ophthalmologist in neurological diseases.
- 20. Discuss the recent advances in assessment of retinal function.
- 21. Describe the neuro protectors in ophthalmology
- 22. Describe the principles of achieving emmetropia in modern day cataract surgery.
- 23. Discuss the causes and problems in management of childhood blindness.
- 24. Current concepts in management of Uveitis
- 25. Endonasal dacryocystorhinostomy.
- 26. Describe the merits and demerits of LASIK versus PRK in management of myopia.
- 27. Stem cells transplantation.
- 28. Write short notes on:
  - a) Transpupillary thermo therapy
  - b) Confocal laser ophthalmoscopy

#### 183-NR M.S. DEGREE EXAMINATION – APRIL, 2012 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe the surgical approaches to the para pharyngeal space.
- 20. Discuss about canal wall up and canal wall down mastoidectomy.
- 21. Deltopectoral flap
- 22. Modified radical neck dissection.
- 23. Role of embolisation in ENT.
- 24. Gene therapy in ENT.
- 25. Cavernous sinus thrombosis.
- 26. Complications of tracheostomy.
- 27. Cochlear implants.
- 10. Image guided surgery.

#### M.D. DEGREE EXAMINATION – APRIL, 2012 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- **21.** Development of face and its anomalies.
- **22.** Section of midbrain at the level of superior colliculus.
- **23.** Spermatogenesis.
- **24.** II branchial arch and its derivatives.
- **25.** IV ventricle of brain.
- **26.** Fibers system of cerebrum.
- **27.** Notochord.
- 28. Nuclei of cerebellum and its connections.
- **29.** Ectopic pregnancy.
- **30.** Cauda equina.

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Calcinosis cutis
- 20. Delusions of parasitosis
- 21. Senile pruritus
- 22. Leukonychia
- 23. Pyoderma gangrenosum
- 24. Raynaud's phenomenon
- 25. Tuberous xanthoma
- 26. Lipomelanotic reticulosis
- 27. Imiquimod
- 10. Purpura simplex

#### M.D. DEGREE EXAMINATION – APRIL, 2012

#### HOSPITAL ADMINISTRATION

Paper-IV – Administration of Clinical and Non-Clinical Services and Administrative procedures

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Zoning of OT department of a tertiary care hospital
- 20. Physical facilities of 12 bed ICU
- 21. Quality control in hospital laboratory
- 22. Control of Hospital Acquired Infections in bone-marrow transplant unit.
- 23. Hospital signages
- 24. Geriatric services
- 25. Blood safety policy
- 26. Planning of mortuary services
- 27. Exit interview and discharge procedure
- 10. Landscaping in hospitals

#### EMERGENCY MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anatomy of surgical airways
- 2. Define osmotic Diuresis. Describe the action of various osmotic diuretics.
- 3. Mechanism of metabolic response to trauma
- 4. Describe glomerular filtration rate and its importance.
- 5. Discuss anion gap.
- 6. Describe the physiology of renin and angiotensin system.
- 7. Describe cerebral auto regulation
- 8. Significance of revised trauma score.
- 9. What is ankle bacterial index and its importance
- 10. What is oxygen dissociation curve and its importance

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101-NR

M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012

**GENERAL MEDICINE** 

Paper-II – Disorders of CVS, respiratory system, Kidney, GIT including liver and pancreas

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Acute Coronary Syndrome
- 29. Solitary Pulmonary nodule
- 30. Nephrotic Syndrome
- 31. Irritable Bowel Syndrome
- 32. Auto Immune Hepatitis
- 33. Describe the management of Hypertensive Emergencies.
- 34. Describe the management perspectives of Obstructive Sleep Apnea Syndrome.
- 35. Describe the pathophysiology of clinical manifestations of mal-absorption disorders.
- 36. Describe the management of acute respiratory distress syndrome.
- 37. Describe the causes, clinical features, diagnostic studies for acute kidney injury.

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Causes and diagnosis of recurrent pregnancy losses.
- 29. Diagnosis and management of fetal distress
- 30. Discuss etiology of non immune hydrops.
- 31. What are the causes of sudden postpartum collapse?
- 32. What are the causes of maternal mortality what steps should be taken to reduce it?
- 33. Management of very small new born baby.
- 34. Role of tocolysis in pre term labour.
- 35. Disseminated intravascular coagulation.
- 36. Portogram.
- 10. Sickle cell disease

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2012

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Describe etiology patho physiology, diagnosis, prevention and management of Broncho Pulmonary Dysplasia.
- 39. Mention strategies to reduce perinatal and neonatal mortality
- 40. Diagnosis and management of new born baby with diaphragmatic hernia.
- 41. What are the principles of growth and development how do you assess development of 2 yrs. Old child?
- 42. Mention various behavioral and habit disorders, pervasive developmental disorders and their management.
- 43. How will you approach a preschool child with short stature?
- 44. Name the causes of Anemia in newborn, write brief note on Anemia of infancy.
- 45. What is IMCI? Discuss the merits and demerits of IMCI.
- 46. Write short notes on
  - a. Juvenile Delinquency
  - b. Thumb sucking
- 10. Discuss the causes, laboratory findings and management of DKA.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012

#### ANAESTHESIOLOGY

Paper-II: Anaesthesia in relation to associate systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Describe the Anesthetic Problems and management of 60 yrs old patient with COPD coming for emergency laparotomy.
- 30. Discuss the challenges and anesthetic management of 120 kg female coming for laparoscopic cholecystectomy.
- 31. Discuss the problems in the anesthetic management of aneurismal clipping in patient with SAH of 4 days duration.
- 32. Describe awareness during anesthesia. Mention the monitors used to measure the depth of anesthesia.
- 33. Discuss etiology and treatment of intra operative cardiac arrhythmias.
- 34. Describe anesthetic management of patients with diabetes mellitus posted for emergency laparotomy.
- 35. Discuss the Anesthetic management of strabismus surgery in a 3 year old child.
- 36. Discus the Anesthetic management of a patient requiring total laryngectomy.
- 37. Discuss the Anesthetic problems involved in obese patient.
- 38. Discuss the preoperative assessment and anesthetic management of a man of 60 year old posted for Porto cavil anatomists.

## M.D. DEGREE INTERNAL ASSESSEMENT EXAMINATION – DECEMBER, 2012 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the pathology of alzheimer's disease.
- 29. Placental site trophoblastic tumors
- 30. Pathology of Myocarditis
- 31. Pagets disease of bone.
- 32. Discuss the Vesiculobullous lesions of the skin.
- 33. Asbestos related Neoplasia
- 34. Pathology of MPGN
- 35. Discuss Lymphnode pathology in AIDS
- 36. Gastrointestinal stromal tumors
- 10. Elaborate current concepts in Pathogenesis of Endometrial Carcinoma.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 RADIO DIAGNOSIS

Paper-II: Components of MD Radio diagnosis (clinical radiology and imaging related to gastrointestinal tract, genitourinary tract and Obstetrics and Gynecology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLWING:

- 28. Describe the role of imaging and radiological features and GI tract lymphomas.
- 29. Enumerate causes of lower gastrointestinal bleeding. Mention imaging findings in Colonic Carcinoma.
- 30. Mention details about PNDT.
- 31. Mention the various congenital lesions of kidney and its imaging findings.
- 32. Role of color Doppler and ultrasound in post renal transplant patient.
- 33. Enumerate various Benign Liver Masses. How will you evaluate them by CT and MRI?
- 34. A young female presenting with acute pain in the pelvis, what are various causes? Howe will you evaluate Radiologically?
- 35. Mention various causes of upper GI bleed in an young adult.

  Discusses Radiological evaluation including interventions.
- 36. Describe anatomy of Prostate. Discuss TRUS guided biopsy in prostate malignancy.
- 10. Radiological evaluation of intestinal Tuberculosis.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012

### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss indications and important of bronchoscopy in the diagnosis of pulmonary tuberculosis.
- 29. Discuss concept of HIV / TB co infection
- 30. Immunological diagnosis of Pulmonary Tuberculosis
- 31. Management of Pulmonary Tuberculosis in Renal & Hepatic failure
- 32. Describe the various forms of abdominal tuberculosis diagnosis and management.
- 33. Discuss the differential diagnosis of Tuberculoma in the lung and its management
- 34. Discuss the clinical features and management of Pancoast tumor.
- 35. Multi drug Resistant Tuberculosis
- 36. Discuss tuberculosis of spine.
- 10. Atypical mycobacteria

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Tularemia
- 29. Antibiotic resistance pattern in Enterococcus
- 30. Laboratory diagnosis of Brucellosis
- 31. Write in detail about etiology, pathogenesis and lab diagnosis of Gas gangrene.
- 32. Write about the morphology, pathogenesis and lab diagnosis of campylobacter jejuni.
- 33. Discuss in detail about the lab diagnosis of Leptospirosis.
- 34. Write a detailed account of Actinomycosis.
- 35. Classification and diseases caused by Atypical mycobacteria.
- 36. Discus the BCG vaccine. Add a note on newer mycobacterial vaccines.
- 37. Discuss in detail about the laboratory diagnosis of urinary tract infections.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Give an account of Influenza pandemics affecting the world with emphasis on preventive measures at district level.
- 30. Briefly discuss the newer vaccines for the control of major communicable diseases in India.
- 31. Describe briefly the epidemiology and prevention of major Arboviral diseases prevalent in India.
- 32. Discuss the causes for increase in the traffic accidents in the country. Add a note on preventive measures for controlling the traffic accident related deaths.
- 33. Discuss the epidemiology and prevention of tobacco related cancers prevalent in India.
- 34. Discuss the strategy for elimination of leprosy in India.
- 35. Endemic fluorosis in Andhra Pradesh.
- 36. Epidemiology of Diabetes.
- 37. Describe in detail the National Programme for control of blindness
- 38. "Tuberculosis has emerged as Global Emergency" Discuss.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Post Concussional Syndrome
- 29. Apraxias
- 30. Insomnia
- 31. Sub cortical dementias
- 32. Sexual dysfunction and its management
- 33. Psychiatry and endocrine disorders
- 34. Premenstrual Syndrome
- 35. Evidence Based Psychiatry
- 36. Hypochondriasis
- 10. Psychiatric aspects of cancer.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Formation and regulation of Ketone bodies. Mention their normal level in plasma and How do you detect them in urine.
- 29. Enumerate the mechanisms of transport of glucose into the cells.
- 30. Enumerate the inborn errors of Sulphur containing amino acids.
- 31. Regulation of heme synthesis.
- 32. What is meant by reciprocal regulation? Explain with respect to glycolsis and gluconeogenesis.
- 33. Explain the biosynthesis of creatine phosphate. What is creatinine coefficient for males and females?
- 34. Describe de novo pathway of purine nucleotide biosynthesis. Add a note on regulation of this pathway.
- 35. Explain antioxidant defence mechanism in biological system.
- 36. Write about salvage pathways involved in Nucleotide metabolism and associated disorders.
- 37. Write about transport of cholesterol and regulation of intracellular cholesterol.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Role of Beta blockers in congestive heart failure
- 38. Potassium Channel openers
- 39. Enzyme Inhibitors in Parkinsonism
- 40. Complications of Diuretic therapy
- 41. Depolarizing skeletal muscle relaxants
- 42. GABA receptor modulators in therapeutics
- 43. ACE inhibitors
- 44. Parenteral anesthesthetics
- 45. Mood stabilizers
- 10. Drugs used in migraine.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 FORENSIC MEDICINE

Paper-II: Pathology and Microbiology in relation to forensic medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

- 38. Nucleotides and its significance
- 39. Auto immune diseases
- 40. Discuss the uses of Microbiology in Forensic Medicine
- 41. Precipitin test and its uses in Forensic Medicine
- 42. Discuss the causes of death due to injuries
- 43. Describe the Patho physiology of respiratory failure.
- 44. Aetiology and Pathology of post traumatic emboli
- 45. Enumerate the tests for detecting blood stains
- 46. Describe the role played by bacteria in putrefaction.
- 47. Post mortem diagnosis of myocardial infarction.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Hypothalamo Pituitary Axis
- 38. WIRZ Hypotheses
- 39. Wolff Chaikoff effect
- 40. Addison's disease
- 41. Gastric Emptying
- 42. Role of platelets in Hemostasis
- 43. Electrophysiology of GI Smooth muscle
- 44. Counter current mechanism
- 45. Physiology of growth
- 10. Fetoplacental unit.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012

### **RADIOTHERAPY**

Paper-II: CNS, Head & Neck, Orbit thyroid, Lung and Mediastinal malignancies, malignancies breast esophagus, lymphomas, leukemia's and pediatric tumors.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Principles and practice of Breast conservation treatment in Ca. Breast
- 11.SBRT
- 12. Pathological types of Ca thyroid and management of differentiated thyroid malignancy
- 13. Describe the clinical features and management of Craniopharyngioma
- 14. Role of chemo radiation in Ca. Esophagus
- 15. Classify CNS tumors and management of Medulloblastoma
- 16. Role of Radiotherapy in Hodgkin's lymphoma
- 17. Pathological classification of lung cancer and role of RT in NSCLC
- 18. Glomus tumor
- 10. Discuss the management of malignant pleural effusion.

## M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe the fractures due to fall on out stretched hand
- 29. Discuss the mechanism of fracture spine and its management
- 30. Discuss etiology, clinical features and management of Carpal Tunnel Syndrome.
- 31. Discuss the management of penetrating abdominal injuries.
- 32. Discuss "TRIAGE"
- 33. Discuss peripheral Nerve injuries
- 34. Discuss organ procurement and preservation.
- 35. Describe the associated internal injuries in PELVIC fractures and outline the management of Bladder injury.
- 36. What are the principles of fracture management? Briefly outline the management of pathological fracture.
- 10. What are the various methods to assess blood loss during surgery and how is surgical hemostasis achieved?

## M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 37. Management of Trochanteric fractures
- 38. Classify pelvic fractures and write principles of management
- 39. Sesamoid fractures
- 40. Proximal Humerus fracture classification and management of fracture dislocations
- 41. Acute volkman ischemia
- 42. Physical injuries classify with examples and write their management and complications
- 43. Fractures of distal femur
- 44. Describe the corrective osteotomies surrounding the HIP discuss its indications
- 45. Classify the ankle injuries / mechanism / types / clinical manifestations and treatment.
- 46. Management of Non union fracture scaphoid.

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### M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 OPHTHALMOLOGY

Paper-II: Lids, Ocular adnexa, systemic ophthalmology, neuro ophthalmology, community ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Homonymous Hemianopia
- 30. Corneal Blindness
- 31. Toxoplasmosis.
- 32. Thyroid Ophthalmopathy
- 33. Management of Ptosis.
- 34. Etiology and management of Entropion
- 35. Causes of epiphora in neonate and management of congenital nasolacrimal duct obstruction.
- 36. Ocular manifestation of tuberculosis
- 37. Causes of Bilateral disc edema and its management.
- 10. VISION 2020 Aims and Targets

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## M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 OTORHINOLARYNGOLOGY

Paper-II: Diseases of ear, nose and throat, surgical pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss about Otosclerosis with special reference to its foci, histology, surgical pathology and causes of sensorineural hearing loss in otosclerosis.
- 29. Describe the etiopathogenesis, clinical features, spread and management of naso pharyngeal carcinoma.
- 30. Write in detail the types and spread of carcinoma larynx
- 31. Classify and discuss the aetiology and pathology of oral ulceration
- 32. Describe Ludwig's Angina and its spread of infection to different neck spaces.
- 33. Discuss the pathogenesis and complications of sinusitis
- 34. Discuss the ENT manifestations of HIV disease
- 35. Describe the formation and spread of Cholesteatoma
- 36. Discuss Cavernous sinus Thrombosis
- 37. Describe the etiopathogenesis, clinical features and current therapy for Rhinoscleroma.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Temporo mandibular joint
- 38. Pericardium and sinuses of pericardium.
- 39. Pelvic diaphragm
- 40. Surgical spaces of the hand
- 41. Intra capsular structures of knee joint
- 42. Male urethra
- 43. Rectum and anal canal
- 44. Tympanic cavity
- 45. Pleura
- 10. Shoulder joint

### M.D. DEGREE EXAMINATION – APRIL, 2012 D.V.L.

Paper-II: General dermatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write about melanogenesis and classify pigmentory disorders.
- 2. Classify Acanthosis Nigricans. Write about endocrinal disorders associated with it.
- 3. Enumerate the types and etiopathogenesis of Lichen planus.
- 4. Classify drug reactions and list the teratogenetic drugs with precautions to be taken.
- 5. Causes of telangiectasia and write about Osler-Rendu-Weber disease.
- 6. Discuss the etiology, clinical features, diagnosis and management of atopic dermatitis.
- 7. Describe the cutaneous diseases associated with streptococcal infection
- 8. Immunofluorescence technique and details of its applications in dermatology.
- 9. Physical urticaria Discuss
- 10. Enumerate disorders of apocrine sweat glands and discuss in detail about Hidradenitis suppurativa

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2012

### HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe the three levels of health care in India. Enumerate the elements of Primary Health care and add a note on principles of primary health care.
- 29. Discus the epidemiology of chronic Non communicable diseases and specific prevention strategy coronary Heart disease.
- 30. How do you investigate food poisoning? What are the prevention and control measures.
- 31. Describe the design of Randomized controlled Trial (RCT) with relevant examples.
- 32. Discuss the role of Family in Health and Disease?
- 33. Sampling methods
- 34. Epidemiology of Tuberculosis
- 35. National Leprosy Control Programme
- 36. Medical Audit
- 10. Cohort Study

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## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 RADIODIAGNOSIS

PAPER-IV: Clinical radiology related to CNS, Orbits and recent advances in radiology and imaging and interventional radiology and nuclear medicine

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Enumerate various ring enhancing lesions of Brain. Discuss MRI features of infective conditions.
- 2. Describe various congential anomalies of posterior cranial fossa. Discuss MRI findings of two conditions.
- 3. Discuss the radiological approach in a suspected case of subarachnoid haemorrhage.
- 4. What are the causes of Proptosis? Discuss radiological approach to unilateral proptosis.
- 5. Classify MRI contrast agents. Discuss the principles and their applications.
- Discuss indications, technique and complications of bronchial artery embolization.
- 7. Enumerate causes of orbital masses. Discuss imaging features of two common masses in an adult.
- 8. Mention differential diagnosis of extradural spinal masses.
- 9. Mention role of imaging in Leukodystrophies.
- 10. Mention clinical applications of diffusion tensor imaging.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 ANAESTHESIOLOGY

## PAPER-IV: INTENSIVE CARE MEDICINE, PAIN MEDICINE AND RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the Recent Advances in Multimodal Analgesia.
- Discuss the recent developments in the management of difficult airway.
- 3. Describe the importance of Acute pain Service. How will you establish acute pain services in a Teaching hospital.
- 4. Describe three in one block and its application.
- 5. Discuss sedation for patients in the intensive care unit.
- 6. Discuss the management of Unconscious patient coming with history of Salt water drowning in Intensive Care.
- 7. What are the current concepts of CPR (Cardiopulmonary resuscitation)
- 8. Describe the simulators used in anaesthesia teaching.
- 9. Transesophageal echocardiogram.
- 10. What is ventilator associated Pneumonia? What is the treatment and preventive measures.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 ANATOMY

PAPER-IV: NEUROANATOMY AND EMBRYOLOGY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Development of palate and anomalies.
- 2. Nuclei of the floor of 4<sup>th</sup> ventricle.
- 3. Development of eye.
- 4. Nuclei of the thalamus and connections.
- 5. Fate of pharyngeal pouches.
- 6. Motor cortex.
- 7. Facial nerve course and lesions.
- 8. Placental barrier.
- 9. Chorion.
- 10. Development of the urinary bladder with anomalies.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 BIOCHEMISTRY

PAPER-IV: CLINICAL BIOCHEMISTRY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write a note on ribonucleotide reductase and write biochemical defects in severe combined immune deficiency syndrome.
- 2. Describe Lysosomal storage disorders.
- Write briefly on metabolic acidosis. How is it compensated and regulated.
- 4. Describe the metabolic changes that occur in diabetic ketoacidosis. How will you investigate.
- 5. Write about the principles involved in the methods used to estimate total and HDL-cholesterol.
- 6. Write about Hypothyroidism and its investigations in clinical biochemistry laboratory.
- 7. Write how chronic complications associated with diabetes mellitus are investigated.
- Significance of cardiac markers in diagnosis and management of myocardial infraction.
- Metabolic changes and investigations done in Acute Renal Failure (ARF).

10.Multiple Endocrine Neoplasia (M.E.N).

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 COMMUNITY MEDICINE

PAPER-IV: HEALTH ADMINISTRATION AND RELATED SUBJECTS

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Briefly describe a model of health care delivery system in India. What is the organizational structure of health care at District level.
- 2. Briefly discuss the role of major Non-Governmental Organizations in promoting health and family welfare in India.
- 3. Discuss the elements of evaluation of health care services.
- 4. Discuss the organization of Panchayat raj and its role in improvement of health status of communities.
- 5. Discuss the Indian Public Health Standards for improvement of health services at Primary Health Centres and Sub-centres.
- 6. International Red Cross Society.
- 7. Critical Path Method (CPM) with example.
- 8. Discuss the role of medical colleges in social systems in light of National Health Policy of India.
- 9. Alternative Health Financing options.
- 10. Describe the salient points from National Population Policy 2000.

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## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 D.V.L.

PAPER-IV: DERMATOLOGY IN RELATION TO OTHER SYSTEMIC DISEASES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Classify cutaneous markers of internal malignancy and discuss in detail Leser-Trelat sign.
- 2) Describe the clinical features, diagnosis and treatment of systemic lupus erythematosus.
- 3) Classify calcifying disorders of skin and describe in detail dystrophic calcification.
- 4) Behcet's disease
- 5) Describe the cutaneous manifestations of Endocrine disorders.
- 6) List the internal causes of itching and write about the characteristics of psychogenic pruritus.
- 7) Dermatological manifestations of diabetes mellitus.
- 8) Pellagra.
- 9) Oral manifestations of autoimmune dermatoses.

10) Cutaneous signs of chronic renal failure.

## MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 OTORHINOLARYNGOLOGY

PAPER-IV: OPERATIVE SURGERY AND ALLIED CLINICAL SUBJECTS
CONNECTED TO ENT

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss about the indications and parts of cochlear implants and steps of surgery.
- 2. Describe the various flaps in head and neck reconstruction.
- Describe the indications and procedure of external carotid artery ligation in ENT.
- 4. Define Sleep Apnoea Syndrome. Enumerate the causes and discuss its management.
- 5. Discuss the etiopathology, clinical features and management of Otogenic Brain Abscess.
- Newer trends in Radiological imaging with respect to ENT, Head and Neck Surgery.
- 7. Indications and procedure of total Laryngectomy.
- 8. Discuss the pathology and management of retropharyngeal abscess.
- 9. Discuss the management of CSF rhinorrhea.
- 10. Surgical anatomy and steps of Submandibular gland excision.

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## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 FORENSIC MEDICINE

PAPER-IV: FORENSIC MEDICINE PROPER

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Classify Insanity and discuss the types of delusions with examples.
- 2. Enumerate unnatural sexual offences.
- 3. Human experimentation medico legal aspects.
- 4. What is a seminal fluid and enumerate the chemical tests and add a note on the Medico legal importance of Seminal stains.
- 5. Discuss formation and functions of State Medical Council.
- 6. Adverse drug reactions post mortem diagnosis
- 7. Define consent and discuss the requirements of valid consent.
- 8. Describe Consumer's Protection Act. How far it is applicable in medical profession.
- 9. Differentiate neurosis and psychosis with examples. Consider obsession in relation to these two.
- 10. Site four examples which come under both the concepts of professional misconduct and professional negligence with presentation of the meaning of both the concepts.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 HOSPITAL ADMINISTRATION

PAPER-IV: Administration of Clinical and Non-Clinical services and Administrative procedures

TIME: 3 HOURS Max.Marks: 100

**NOTE:** Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write briefly on planning and organizing of Hospital Engineering services for a General Hospital.
- 2. Describe the planning considerations for a cathlab unit for cardiology unit.
- 3. Describe the Medico social worker (MSW) services for a 750 Bedded general and superspeciality hospital.
- 4. How do you plan and organize security services for 1000 bedded general hospital.
- 5. Describe the Bio medical waste Management Handling Rules & Regulations. Add a note on Forms and Records to be maintained.
- 6. Describe the logistics support for organizing the Trauma care services for 1000 bedded tertiary care Teaching Hospital.
- 7. Define the functions of the PUBLIC RELATIONS Department in a private hospital setting. Discuss the staffing requirements to Market the services.
- 8. How do you mange Dietary services for Medical College Teaching Hospital with intake of 150 MBBS Students per year.
- 9. Describe various Equipments available and their maintenance in Radiology and Imaging services in Tertiary care Teaching Hospital with a note on PACS.
- 10. Describe the Administrative issues in the organization of Blood Transfusion service in a Tertiary care Teaching Hospital.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 GENERAL MEDICINE

PAPER-IV: Tropical medicine, genetics, infectious diseases nutrition, critical care medicine

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the Genetic Disorders of Pulmonary, Renal and Endocrinal Diseases and their possible interventions.
- 2. Describe the pattern of infection in tropical countries.
- Describe the global features, pathogenesis, clinical manifestations, diagnosis and treatment leptospirosis.
- 4. Describe the evaluation and management of Obesity.
- 5. Describe the prevention of complications of critical illness.
- 6. Plasmodium Falciparum.
- 7. Strongyloides hyper infection syndrome.
- 8. Total Parenteral Nutrition.
- Cytogenetics: Chromosomal Abnormalities and clinical presentations.
- 10.Management of ARDS.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 MICROBIOLOGY

PAPER-IV: APPLIED MICROBIOLOGY AND RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Give an account of recent advances in the diagnosis of parasitic infections.
- 2. Write an essay on recent trends in Mycobacterial research.
- 3. Molecular methods for the clinical Microbiology Laboratory.
- 4. Write an essay on Metallo beta Lactamases.
- 5. Write an essay on Swine flu.
- 6. Mechanisms of action of antimicrobial drugs.
- 7. Write in detail about flow cytometry.
- 8. Write briefly on bacterial vaginosis.
- 9. Oncogenes.
- 10. Discuss the recent advances regarding the mechanism of drug resistance in gram negative bacteria.

## MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 OPHTHALMOLOGY

PAPER-IV: RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. OCT its clinical uses in Ophthalmology.
- 2. What is Bionic eye and how does bionic eye allow the blind to see.
- 3. Pentacam and its uses.
- 4. Latest instruments for early detection of Glaucoma.
- 5. Recent advances in the management of Retinoblastoma.
- 6. Lasers in Ophthalmology conductive keratoplasty.
- 7. Newer IOL designs.
- 8. Collagen Cross linkage.
- 9. Gene Therapy.
- 10. Corneal Topography

## MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 ORTHOPAEDICS

PAPER-IV: RECENT ADVANCES IN OPERATIVE SURGERY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Peripheral Nerve Injuries Discuss the latest nerve Conduction studies and its application in peripheral nerve Injuries.
- 2) Role of Isotopes study in bone pathology.
- 3) What are the various procedures in the case of partial HIP replacement and THR and its modalities discuss in detail.
- 4) Recent advances in lumbar discectomy.
- 5) Ultrasound in orthopedics.
- 6) Management of Cartilage defects in the joints.
- 7) Role of computer assisted navigation in Total Joint Replacement.
- 8) Biological Internal fixation of fractures.
- 9) Limb salvage techniques in management of osteosarcoma.
- 10) Recent advances in treatment of spondylolisthesis.

## MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 OBSTETRICS & GYNAECOLOGY

PAPER-IV: MEDICINE AND SURGERY IN RELATION TO OBSTETRICS AND GYNAECOLOGY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Prevention of ureteric injuries in Obstetrics and Gynecology.
- 2. Discuss the diagnosis and management of peri partum cardiomyopathy.
- 3. Surgical management of severe post partum hemorrhage.
- 4. IV degree perineal tear.
- 5. Drug treatment in Epilepsy in Pregnancy.
- 6. Antiretroviral therapy in HIV
- 7. Discuss the current controversies in hormone replacement therapy.
- 8. Discuss the causes of postpartum collapse.
- Clinical manifestations, diagnosis & medical management of hyperprolactinemia.
- 10. Write briefly on abdominal incision.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 PAEDIATRICS

PAPER-IV: DISEASES OF INFANCY AND CHILDHOOD

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- Discuss the approach to a child with Acute congestive Cardiac Failure.
- 2. Write the complications of Hepatitis & Management of Fulminant Hepatic failure.
- 3. Enumerate the causes of recurrent stridor in children.
- 4. Classify Epileptic seizure. Write the diagnosis and management of infantile spasms.
- 5. Causes and principles of management of END stage renal disease in children.
- 6. Write briefly about diagnosis and management of GERD.
- Describe the hemostatic mechanism and discuss the management of hemophilia.
- 8. Differential diagnosis & risk factors of sudden infant death syndrome.
- 9. Complications and management of acute bacterial meningitis.
- 10. Discuss etiopathogenesis, clinical features & management of hemolytic uremia syndrome.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 PHARMACOLOGY

PAPER-IV: CLINICAL PHARMACOLOGY - THERAPEUTICS

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Drug therapy of Psoriasis.
- 2. Rational drug use.
- 3. Insulin analogues.
- 4. Interferons.
- 5. Drugs used in glaucoma.
- 6. Treatment of Benign Prostatic hypertrophy.
- 7. Drugs used in Acute myocardial infarction.
- 8. Drug therapy of Anaphylactic shock.
- 9. Drug therapy of alopecia.
- 10. Management of Postmenopausal osteoporosis.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 PATHOLOGY

# PAPER-IV: RECENT ADVANCES IN PATHOLOGY RELATED TO CLINICAL MEDICINE

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Liquid based cytology.
- 2. Discuss bioterrorism.
- 3. Application of stem cell therapy.
- 4. Non-invasive autopsy.
- 5. Sudden infant death.
- 6. Light chain Immunofluorescence in various Nephropathies.
- 7. Molecular basis of thalassemia.
- 8. Recent Photography in histopathology.
- 9. Bone marrow transplantation.
- 10. Role of Nutrition in Cancer.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 PHYSIOLOGY

PAPER-IV: APPLIED PHYSIOLOGY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Lysosomal storage diseases.
- 2. Mismatched transfusion.
- Physiological basis for psychotic disorders Depression,
   Schizophrenia.
- 4. Evoked potentials.
- 5. Renal function tests.
- 6. Endothelium endocrine Gland Justify.
- 7. Theories of aging.
- 8. Physical Principles of MRI.
- 9. Surrogate Pregnancy.
- 10. BERA.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 PSYCHIATRY

PAPER-IV: PSYCHIATRIC SPECIALITIES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Impact of Terrorism.
- 2. Mental Health Act.
- 3. Sleep disorders.
- 4. Management of terminally ill.
- 5. Neuro psychiatric aspects of Epilepsy.
- 6. Relapse prevention in alcoholism.
- 7. Psychiatric disorders in late life.
- 8. Valproate.
- 9. Child abuse and neglect.
- 10. Assessment and management of sexual offenders.

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 PULMONARY MEDICINE

PAPER-IV: Epidemiology of tuberculosis and prevention, recent advances in tuberculosis

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Sleep Apnea study
- 2. Role of MRI in Pulmonary Medicine
- 3. Acid base balance in Respiratory failure.
- 4. Newer drugs in COPD & Bronchial Asthma
- 5. Discuss NSS in Tuberculosis and give your present scenario in control of Pulmonary Tuberculosis.
- 6. Role of vaccines in respiratory diseases.
- 7. Describe the rapid diagnosis in pulmonary and extra pulmonary tuberculosis.
- 8. Incidence of tuberculosis present world scenario.
- 9. What are the newer Anti- Tuberculosis drugs in the pipe line. What should be done to improve the situation diseases.
- 10. Discuss the HIV/TB in Indian Scenario and what measures should be taken to contain already dual epidemic?

## MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 RADIOTHERAPY

PAPER-IV: Clinical subjects in relation to radiotherapy, recent advances in radiotherapy & oncology

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. QA in Radiotherapy
- 2. Discuss the techniques and advantages of conformal Radiotherapy over 2D Radiotherapy.
- 3. Proton Beam Radiotherapy.
- 4. O.A.R's in Head and Neck cancer.
- 5. Cyber knife.
- 6. Hyperthermia.
- 7. Radio sensitizers & Radio modifiers.
- 8. Advantages of TNM staging.
- 9. Radiotherapy in benign conditions.
- 10. Hormone treatment in Oncology.

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## MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2012 GENERAL SURGERY

PAPER-IV: GENERAL SURGERY, OPERATIVE SURGERY INCLUDING RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- 1. "LASERS" in surgery
- Describe clinical features and management of "Barrett's oesophageus.
- 3. Discuss the guidelines for diagnosis & Management of Pancreatic trauma.
- 4. Describe the recent advances in management of intestinal fistula.
- 5. Management of parathyroid adenoma. Out line the management of hypercalcemia crisis.
- 6. Recent trends in Bariatric Surgery.
- 7. Describe the aetiology, clinical features and management of carcinoid tumors.
- 8. Classify Surgical Wounds. Describe the role of Antibiotics both in the prophylaxis and management of Surgical Site Infections. (4+3+3)
- 9. Define SILS/NOTES. What are the current applications of these procedures in General Surgery and highlight the technical challenges faced when compared to conventional Laparoscopic Surgery. (3+4+3).

10. What are the Essentials of Safe Bowel Anastomosis? How would you manage a high output Enterocutaneous Fistula following ILEAL RESECTION and END TO END Anastomosis. (5+5).

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#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

- Discuss the normal lobar functions of the cerebrum and their abnormalities?
- 2. Portal systemic Anastomoses
- 3. Discuss the various serological tests used in the diagnosis of infectious diseases?
- Describe the physiology and interpret various abnormalities of seminal fluid.
- 5. Mention the muscles connecting the upper limb a) To the thoracic wall

- b) To the vertebral column there actions and nerve root value?
- 6. Pathophysiology of heart failure.
- 7. Blood supply of spinal cord and its clinical significance
- 8. Application of evidence based medicine
- 9. Laboratory investigations in malabsorption syndromes
- 10. Biomarkers in disease.

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#### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

- 37. Lymphatic drainage of vulva
- 38. Physiology of puberty
- 39. Medical abortion
- 40. Coagulation failure in obstetrics
- 41. Screening for gestational diabetes.
- 42. Describe fetu –placental circulation. What are the maternal and fetal vascular adaptation structured by ultrasound to predict foetal well being?
- 43. What is the Pathology of benign and malignant gestational trophoblastic diseases?

- 44. What is pap smear?
- 45. Discuss the etiopathogenesis of endometriosis
- 10. Write short notes on
  - a) X Chromosome
  - b) Student chi square test.

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#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions.

All questions carry equal marks.

- 37. How is normal respiration regulated? What are the important differences between mechanics of normal and conventional intermittent positive pressure mechanical ventilation?
- 38. Analyze clinical relevance of physiological factors influencing cardiac output.
- 39. Discuss clinical utility of components of ABG (arterial blood gas) analysis report.
- 40. Discuss clinical utility of microbiological tools to diagnose Paediatric HIV.
- 41. What are the principles of rational selection of antibacterial drugs?
- 42. Write investigative approach for a child with Hemolytic Anemia.
- 43. Pathophysiology of diabetic ketoacidosis.
- 44. Laboratory investigations with interpretation for a child with Arthritis.

- 45. Recombinant DNA technology and its application in Pediatrics.
- 10. Write short notes on
  - a) Liver function tests in extra hepatic biliary atresia.
  - b)Thyroid function tests cord blood, day 1 and day 3.
  - c) Renal function test (i) ATN (ii) Acute cortical necrosis.
  - d) CSF findings in TB meningitis.
  - e) Investigations in addison's disease.

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. What is ICT and mention reasons for raised ICT?
- 38. Edmund Gaskin Boyles
- 39. What are opioid receptors, their function and distribution?
- 40. Principles of blood gas analyzer and give a typical reading
- 41. Give an account of newer muscle relaxants and their use?
- 42. What are various liver function tests?
- 43. How do you measure cardiac output various clinical situations?
- 44. Compare the foetal circulation to circulation in 2 months baby
- 45. Describe factors that influence the uptake of inhalational agents?
- 10.What are coagulation factors and their effects on patient in their

absence?

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Molecular diagnosis of genetic diseases
- 39. Pathophysiology of obesity and mention the consequences of obesity.
- 40. Describe the mechanism of metastasis with emphasis on recent concepts.
- 41. Describe the pathophysiology of D.I.C.
- 42. Discuss the experimental aspect and recent advances in repair.
- 43. Cytoskeleton in health and disease.
- 44. Endotoxic shock.
- 45. Discuss the pathophysiology and complications of thromboembolism.
- 46. Write in detail the radiation injury.
- 10. Host prosthetic interaction.

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions
All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Describe the radiological anatomy of esophagus. Discuss the investigations of esophagus.
- 39. Describe the ultrasound contrast media. Mention the physical principles and clinical applications of ultrasound contrast media.
- 40. Draw and label diagram of modern-image-intensifier. Discuss the functions of each part and mention advantages.
- 41. How will you plan the Radiology department as per the specifications of BARC.
- 42. Describe the anatomy of subarachnoid cisterns. Discuss various methods of imaging in suspected case of hydrocephalus.
- 43. Describe the anatomy of peritoneum and retroperitoneal spaces
- 44. Discuss the embryology of heart with relation to congenital heart disease.
- 45. What are the newer MRI sequences
- 46. Discuss the pathophysiology of contrast induced reactions.
- 10. Biological effects of Radiation.

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Development of Lung and developmental anomalies.
- 38. Methods of measuring diffusion capacity.
- 39. Defenses of the respiratory tract
- 40. Alveolar monophagia
- 41. Vancomycin
- 42. Applied anatomy of Broncho Pulmonary districts.
- 43. Pathogenesis of Obstructive Sleep Apnea.
- 44. Leukotriene Inhibiters.
- 45. Acid-Base balance in respiratory diseases.
- 10. Immuno Pathogenesis of TB.

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe the methods of gene transfer in bacteria.
- 38. Describe the gel precipitation tests
- 39. Discuss the functioning of CSSD in tertiary care hospital
- 40. Discuss and classify hypersensitivity. Discuss type- I hypersensitivity.
- 41. Give an account of role of T lymphocyte.
- 42. Discuss bacterial fimbriae.
- 43. List cytokines. Discuss interleukins and their applications.
- 44. Extended spectrum Beta lactamases.
- 45. Chemical disinfectants
- 10. Nobel laureates in Microbiology.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Discuss the man made disasters. Add a note on triage.
- 38. Principles of Health Communication
- 39. Discuss the role of family in health and disease
- 40. Levels of prevention and modes of intervention.
- 41. Components of health information system and uses of health information.
- 42. Globalization effect an health.
- 43. Role of Panchayats in health care.
- 44. Briefly discuss the ecology of malnutrition in India.
- 45. Discuss the role of Chi-square test in biomedical research
- 10. Time trends in disease recurrence

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 37. Describe the contributions of Philippe Pinel and Esquire towards making psychiatry a medical specialty?
- 38. The role of psychiatrist in general hospital psychiatry?
- 39. Relevance of HPA axis in the causation of various psychiatric syndromes?
- 40. Describe the connections and functions of Dorso lateral frontal cortex.
- 41. What are various steps in the planning a psychiatric epidemiological survey?
- 42. What is Ethology and describe its contribution in understanding human psychology?
- 43. Describe the tests for conceptual disorganization.
- 44. What is personality and describe at least one personality theory?
- 45. Insight and its relevant to the outcome of psychiatric disorders?
- 10. Neurotransmitters and signaling?

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 37. Explain the general laws of thermodynamics. Give four examples for nucleotide triphosphates.
- 38. Give an account of standard deviation (S.D), standard error of mean (S.E), P distribution and regression are useful in research in the field of biochemistry.
- 39. What are the types of centrifugation? Describe the uses of ultra centrifugation.
- 40. What is Beer Lambert's law? What is the difference between a calorimeter and spectrophotometer?
- 41. Classify enzymes. Discuss the importance of three enzymes in clinical practice.
- 42. Describe in detail oxidative phosphorylation with necessary diagrams.
- 43. Write short notes on
  - a) Acute phase reactants
  - b) Henderson Hasselbalch equation
- 44. Discuss the various types of phospholipids and their function and structure.
- 45. High energy bonds and compounds in Cellular Metabolism.
- 10.Describe the application of radioisotopes in the study of metabolic pathways. How is radioactivity measured?

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Presynaptic receptors.
- 38. Pharmacogenetics
- 39. Pathophysiology of Renal Hypertension
- 40. Importance of intrinsic factor in Megaloblastic anemia
- 41. Bioassay '4' point
- 42. Chi square test
- 43. Pharmacokinetics of drugs in elderly
- 44. H.P.L.C
- 45. Inhalation route in drug delivery
- 10. Use of inbreed strains of animals for experimentation.

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Write about etiology, clinical diagnosis and pathology of acute pancreatitis. Add a note on autopsy findings.
- 38. Describe membrane physiology in brief. How is it relevant to Forensic Medicine?
- 39. Describe the development, morphology, structure and exception of permanent teeth. How does this knowledge help in age assessment? Add a note on Gustafson's formula.
- 40. Describe in brief the scope of Forensic Radiology
- 41. What is sexual dimorphism? How does the human skull show this phenomenon?
- 42. How do you estimate stature in mutilated bodies?
- 43. What are the sudden natural deaths? Explain the protocol for autopsy while approaching a case of sudden death.
- 44. Mention the incisions at Medico legal autopsy. Write about dissecting the heart and its reasons.
- 45. Describe the physiology of foetal blood circulation.
- 10. What is superimposition? Write the techniques and types of superimposition and its advantages and disadvantages.

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Discuss about polymerase chain reactions (PCR) and DNA micro array techniques.
- 38. Calcium oscillations and its importance in cell signalling
- 39. ABC transporters
- 40. Cytokine network in intercellular communications.
- 41. Stochasticity in gene expression
- 42. Interferons
- 43. Body fluid measurements
- 44. Nernst equation
- 45. Homeostasis
- 10. Nerve injury

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 RADIOTHERAPY

PAPER-I: BASIC SCIENCES, RADIATION PHYSICS

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Describe the radio biologic rationale of fractionation in radiotherapy.
- 20. Describe the lymphatic drainage of tongue. Mention the acute and late effects observed following radical radiation treatment of head and neck cancers.
- 21. Quality assurance in Radiotherapy.
- 22. Para-aortic Lymph Node evaluation.
- 23. Discuss in detail regarding the techniques used in screening of carcinoma cervix.
- 24. Outline what are early and late reacting tissues and discuss the Linear Quadratic model along with its clinical significance.
- 25. Compensators in radiotherapy
- 26.CSF Pathway.
- 27. Discuss the "WHO Ladder" of pain management in cancer.
- Describe the mediastinal anatomy and various lesions seen in mediastinum.

#### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe the development of testes and congenital abnormalities.
- 38. Acid base balance
- 39. Classify Haemorrhage. Describe how do you manage reactionary haemorrhage in thyroid surgery.
- 40. Describe histology of lymph node, formation and functions of lymph.
- 41. Write notes on blood supply of colon. Enumerate the precancerous conditions of colon and describe the pathology of colonic malignancies.
- 42. Describe the surgical anatomy of the kidney and the fascial coverings. What is crossed dystopia?
- 43. Describe the formation of brachial plexus. Write brief notes on various brachial plexus lesions.
- 44. Describe the circle of Willis and discuss briefly on aetio-pathogenesis of intracranial tension.
- 45. Describe histology of skin, pathophysiology of burns and skin grafting
- 10. Calcitonin

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the arches of foot and discuss mechanics in relation to pes planus and pes cavus.
- 47. Blood supply of Talus
- 48. Anatomy of Brachial plexus and course and supply of radial nerve
- 49. Describe clinical features and management of fat embolism.
- 50. Fracture healing and factors influencing the union.
- 51. Carpal tunnel
- 52. Diagnostic tests in musculoskeletal Tuberculosis
- 53. Fluid balance in poly trauma patient
- 10. 3 Dimensional computerized tomogram.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Anatomic relations of optic chiasma-clinical importance
- 39. Concepts of binocular vision and ARC
- 40. HLA antigens and the eye
- 41. Direct and indirect gonioscopy
- 42. Optics and uses of low vision aids
- 43. Describe the anatomy course and relations of III cranial nerve and describe the syndromes associated with its Palsy.
- 44. Describe the physiology of accommodation and its anomalies.
- 45. Describe the morphological features of mycobacterium tuberculosis and its ocular manifestations.
- 46. Describe the histopathological features of lacrimal gland tumours.
- 10. Write short notes on
  - a) Prisms in Ophthalmology
  - b) Limbal stem cell
  - c) Drug delivery to the eyes
  - d) Antimetabolites

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe the anatomy of petrous temporal bone.
- 38. Describe various muscular triangles of neck.
- 39. Describe the anatomy of submandibular salivary gland. Add a note on physiology of its secretion.
- 40. Describe the development of tonsil. Write about different surgical approaches to oropharynx.
- 41. Describe the anatomy of cerebellopontine angle and its surgical importance.
- 42. Describe about mechanism of phonation and theories of phonation.
- 43. Describe physiology of deglutition.
- 44. Discuss physiology of smell and causes of altered sensation of smell.
- 45. Discuss the anatomy of soft palate and the impact of its developmental anomalies on ear, nose and throat region
- 10. Write short notes on
  - a) Epstein Barr virus
  - b) Corinne bacterium Diphtheriae.
  - c) Impedance Audiometry
  - d) Dix Hallpike maneuver

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Lymphatic drainage and gross anatomy of mammary gland
- 38. Write briefly about Epiphyses.
- 39. Porto caval anastomoses and its applied aspects
- 40. Name all dural venous sinuses. Write briefly about cavernous sinus and its applied aspects.
- 41. Bronchopulmonary segments and its applied aspects.
- 42. Autonomic innervation of lower limb and applied anatomy
- 43. Surgical spaces of the hand.
- 44. Describe the boundaries, contents and applied anatomy of superior mediastinum.
- 45. Anal canal
- 10. Write briefly notes on
  - a) Spermatogenesis
  - b) Notochord.

#### D.V.L.

#### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe Dermoepidermal junction and its clinical applications.
- 38. Cyto diagnosis
- 39. Mucosal defense mechanism.
- 40. Penicillins in syphilis and gonorrhoeae.
- 41. Immunology of HIV.
- 42. Neurophysiology of Itch
- 43. Lymph nodes in STD
- 44. Thalidomide in C thalidomide
- 45. Discuss Hair in health and disease
- 10. Meckel cell

#### HOSPITAL ADMINISTRATION

## Paper-I – GENERAL ADMINISTRATION AND MANAGEMEMNT IN HOSPITAL FIELD

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Briefly describe the Henri Fayol's principles and narrate with hospital application?
- 11. Describe the Hawthorne experiments and the implications to the management.
- 12. What are the managerial skills required to lead the hospital organization at various levels Discuss.
- 13. Economic Order Quantity
- 14. As an administrator of the hospital, how do you organize the 'Delegation of the Authority' for day to operations and discuss limitations.
- 15. Define leadership? Discuss the competencies of leadership? Classify the leadership theories?
- 16. Decision tree analysis
- 17. Define MBO? Discuss the process of MBO? What are the limitations?
- 18. How do you describe the communication process and narrate the communications barriers?
- 10. Enumerate Mintzberg's managerial roles -

#### **GENERAL MEDICINE**

Paper-III – Disorders of Immune system connective tissue &joints, endocrinology and metabolism, Neurological, poisoning etc., Oncology & Hematology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Recent advances in management of Parkinson's diseases.
- 29. Hypoglycaemia
- 30. Current treatment of Rheumatoid arthritis.
- 31. Recent concepts in the management porphyrias.
- 32. Myelofibrosis
- 33. Anagrelide.
- 34. Acute myeloblastic leukaemia
- 35. Organophosphorus poisoning.
- 36. Immune Reconstitution syndrome.
- 10. Evaluation of hypothyroidism.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 OBSTETRICS & GYNAECOLOGY

#### Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe Pelvic organ prolapse quantification scoring system and indications of surgical management of prolapse.
- 29. Describe types of endometrial hyperplasia and selection criteria for endometrial ablation.
- 30. Complications of ovarian neoplasms.
- 31. Describe staging of carcinoma cervix and management of Microinvasive carcinoma.
- 32. Double puncture laparoscopy.
- 33. Medical eligibility criteria for combined oral contraceptives.
- 34. Colposcopy.
- 35. "EAMCO" regimen in chorio carcinoma.
- 36. Tests for tubal patency in a cen of infertility
- 10. Indications for hysterectomy.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

- 28. Current recommendation in complementary feeding.
- 29. Diagnostic evaluation of child suspected to have immune deficiency.
- 30. Omega 3 fatty acids and their role in infant nutrition.
- 31. Clinical features, management of complication of nutritional rickets in children.
- 32. Etiology, clinical manifestations, diagnosis, complications and management of dengue haemorrhagic fever.
- 33.a) Bornholm disease
  - b) Acute hepatic gingivo stomatitis.
- 34. Clinical features and management of leptospirosis.
- 35. Diagnostic approach to a child with Pyrexia of unknown origin.
- 36. Nutritional management of critically ill child.
  - Discuss the benefits and risks of bone marrow transplantation in children.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Describe the anaesthetic management of an Acute Liver Failure (ALF) patient posted for an incidental surgery.
- 30. Anaesthetic management of a neonate posted for pyloromyotomy.
- 31. Write a note on "Stress of Anaesthesia" in an anaesthesiologist.
- 32. Discuss the preoperative lung function tests for a case posted for pneumonectomy.
- 33. Discuss the systemic changes and problems of pneumoperitoneum during Laparoscopic surgery.
- 34. Outline the anaesthetic management of a 60 years old man with hypertension posted for TURP (Transurethral resection of prostate).
- 35. Write briefly about problems and anaesthesia management for Tracheo Esophageal fistula repair. (Neonate of age 24 hours).
- 36. Anaesthesia considerations for patients with psychiatric disorders.
- 37. Patient controlled analgesia.
- 10. Anaesthesia management for liposuction in a morbidly obese patient.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Molecular cytogenetics of hematological malignancies.
- 30. Discuss the role of red cell cytochemistry in hematological disorders.
- 31. Problems in paediatric blood transfusions.
- 32. Discuss the role of urinary sediment examination in renal diseases.
- 33. Automation in clinical pathology
- 34. Outline the plan of laboratory investigations in coma
- 35. Discuss the preparation of cellblock and its use as a diagnostic tool in cytology
- 36. Discuss utility of intra operative cytology in gynecological diseases
- 37. Describe the squash technique. Describe the squash cytology of CNS tumors .
- 10. Diagnostic utility of fraction of serum lipids.

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M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 RADIO DIAGNOSIS

Paper-III: Components of Radio diagnosis (Clinical radiology related to

Respiratory system, CVS, Musculoskeletal system and pediatrics)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Describe briefly the anatomy of the spinal canal and discuss the diagnostic procedures and radiological findings in any one pathological conduction.
- 30. Describe ultrasound features of anencephaly and holoprosencephaly.
- 31. Write short notes on:
  - a) Radionecrosis
  - b) Superior vena cava compression syndrome
- 32. Bronchial artery embolization.
- 33. Foregut Duplication Cysts.
- 34. CT difference between pleural effusion and ascites.
- 35. Write short notes on:
  - a) Actinomycosis of lung
  - b) Tracheoesophageal fistula.
- 36. Describe the role of ultrasound in thorax (extra cardiac lesions).
- 37. Describe the technique of Arch aortogram. Mention the indications and complications of aortogram.
- 10. Describe the radiological features of bronchogenic carcinoma.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Discuss Ventilator associated Pneumonia.
- 30. Discuss Hepato pulmonary syndrome
- 31. Discuss systemic inflammation in COPD and serological markers
- 32. Approach to diagnosis of diffuse pulmonary parenchymal disease.
- 33. Primary tumors of Pleura
- 34. Management of acute severe asthma in a 40 year old man
- 35. Effects of toxic fume inhalation.
- 36. Management of Lung abscess
- 37. Management of Post operative atelectasis
- 10. Tension Pneumothorax

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe the structure of rabies virus. Discuss the immunoprophylaxes of rabies.
- 29. What is SARS and discuss in detail about its Epidemiology.
- 30. Classify viral hemorrhagic fever and discuss in detail about Crimean Congo fever.
- 31. What is mycetism and discuss in detail about fungal poisoning.
- 32. List the parasites and fungi associated with HIV (Human Immunodeficiency Virus) infection. Describe the methods of demonstration of pneumocystis.
- 33. Classify tinea nematodes and describe the morphology life cycle of Dracunculus medinensis.
- 34. Cryptococcosis
- 35. How do classify viruses based on tropism and describe among one of the neurotropic viruses.
- 36. Classify oncogenic viruses and describe in detail about EB virus.
- 10. Eradication of Malaria Discuss.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning, Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Define Maternal mortality ratio. Mention the interventions that promote the welfare and affect the health of mothers in India. Discuss any one of these interventions in detail.
- 29. What is Anaemia during pregnancy? What are the principles underlying the Anaemia prophylaxis? How is anaemia being managed in the community?
- 30. What is the scientific basis for changing the constituents of ORS by WHO recently? Why is ORS considered one of the best scientific advances by Lancet? Discuss the role ORT in community with a focus on "ORT-corner".
- 31. How is SAM different from the usual PEM? What is the scientific basis for recent changes in the mode of assessment of nutritional status by WHO.
- 32. Define population Explosion. What are the principles involved in achieving population stabilization along with NRR 1 and TFR 2.1.
- 33. How is sex ratio relevant in the context of national development? Discuss briefly the legislative action that took concrete shape in India in the context of sex ratio.
- 34. Define potable water. Mention the characteristics of potable water. How is govt. is trying to provide potable water to the rural and tribal people in India?
- 35. Write in the form of a table different categories of wastes. How are wastes being disposed of in primary health centers and sub centers.
- 36. What are green house effects and global warming. What are the effects of global warming on diseases? Discuss our role as doctors in the community to manage global warming?
- 10. Define ergonomics. What are the principles involved in ergonomics? Discuss the role of ergonomics in the management of Anthracosis.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Cardiac side effects of Psychotropic medication
- 29. Future directions in Psychiatric classification
- 30. Use of Psychotropic medication in renal impairment patients.
- 31. Pseudobulbar palsy
- 32. Borderline personality disorder with special reference to management issues.
- 33. Subcortical dementias
- 34. Evaluation and management of resistant depression.
- 35. Sleep hygiene
- 36. Genetic counselling in schizophrenia
- 10. Newer addictions in adolescents.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 BIOCHEMISTRY

## Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Give in detail mechanism of Hormone action.
- 29. What is BMR? Factors effecting the BMR and its determination.
- 30. Give the pathway of Thyroid hormone.
- 31. Explain the differences and types of protein energy malnutrition.
- 32. Describe the actions of Medullary hormones
- 33. Fiber diet and its functions.
- 34. Second messengers in detail and functions.
- 35. Essential fatty acids and functions.
- 36. Hormones as tumour markers.
- 10. Specific dynamic action and its variations in diseased conditions.

## M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Role of Iodides in thyroid disorders.
- 38. Deflazacort
- 39. Drug therapy of MDR TB
- 40. Monobactams
- 41. Nitroimidazoles
- 42. Antiplatelet agents
- 43. Role of incretins in type II DM
- 44. Imatinib Mesylate
- 45. Uses and misuses of anabolic steroids
- 10. HAART

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 FORENSIC MEDICINE

## Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss about dying declaration and its legal issues.
- 29. Discuss about medicolegal importance of hair.
- 30. Describe the recent amendment of law pertaining to rape.
- 31. Describe the role of Photography in Forensic Medicine.
- 32. Discuss the functions of Forensic science laboratory.
- 33. Describe the changes takes place in a newborn.
- 34. Discuss about the mechanism of aircraft injuries.
- 35. Describe the type of restraint of insane
- 36. Briefly discuss about Medical negligence
- 10. Describe about the postmortem changes in a case of electrical burns.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Define reflexes and classify reflexes
- 38. Define synapses and classify synapses and explain the properties of it.
- 39. Define cardiac output, describe the methods of cardiac output.
- 40. Coronary circulation
- 41. Regulation of respiration neuronal or chemical.
- 42. Artificial respiration
- 43. Define hypoxia and classify hypoxia.
- 44. Draw labeled diagram of visual pathway and explain its abnormalities.
- 45. Hearing Mechanism.
- 10. Taste pathway.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 RADIOTHERAPY

Paper-III: Gynecological Malignancies, GI Malignancies, Hepatobiliary, Uro Genital, Bone Tumours, Soft issues Skin and Appendages, Benign Tumours

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- What do you understand by the term Dose volume histogram? Discuss its clinical significance.
- 2. Discuss the role of radiation in the management of carcinoma stomach and the techniques used.
- 3. Write briefly on AIDS related cancers.
- 4. Concurrent Chemo-radiotherapy in Ca. Rectum.
- 5. How do you manage a patient with Ewing's sarcoma of right Clavicle.
- 6. Premalignant lesions of skin and sequelae of skin irradiation.
- 7. Management of stage I uterine Cervix in a 35 years female
- 8. Radiotherapy in Cutaneous T-cell lymphomas.
- 9. Classify tumours of Testis and write management of localized seminoma.
- 10. Management of metastatic symptomatic Ca Prostate.

## M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Treatment of inoperable Ca. oesophagus.
- 29. Immediate and long term complications of Gastrectomy.
- 30. Aetiology, investigations and management of biliary strictures.
- 31. Management of stricture urethra
- 32. Role of flaps in general surgery.
- 33. Classify odontoma and describe the aetiology, pathogenesis, clinical features and treatment of adamantinoma
- 34. Describe the aetiology, clinical features and management of renal tuberculosis.
- 35. Discuss testicular tumours
- 36. Discuss hiatus hernia
- 10.Describe the development, clinical features and management of thyroglossal cyst.

## M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Developmental Dysplasia of hip and its management
- 29. Epiphyseal coxa vara and its management
- 30. Indications and surgical technique of triple arthrodesis of foot.
- 31. Aneurysmal bone cyst of upper tibia and its treatment
- 32. Foot wear in plantar ulceration for leprosy.
- 33. Causes, diagnosis and treatment of congenital wryneck.
- 34. Causes, diagnosis and surgical procedures for ulnar claw hand.
- 35. POHS Paraplegia
- 36. Multiple Exostosis, clinical manifestations and its complications.
- 10. Spondylolisthesis and its surgical correction.

## M.S. DEGREE INTERNAL EXAMINATION –JUNE, 2012 OPHTHALMOLOGY

Paper-III : Conjunctiva, cornea sclera, lens, glaucoma, uvea, retina, vitreous, squint.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Diagnosis and management of Normotensive glaucoma.
- 30. Systemic association of posterior uveitis.
- 31. Etiology and management of vertical gaze abnormalities
- 32. Trophic Keratitis
- 33. Management of Pediatric cataract.
- 34. Discuss ocular allergy and explain the recent trends in the management.
- 35. Explain recent techniques of Keratoplasty.
- 36. Implantable contact lenses in the treatment of Myopia
- 37. Recent advances of age related macular degeneration
  - 10. Explain Nystagmus and management

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe in detail the various types of "FLAPS' used in head and neck surgery.
- 29. Describe the aetiopathology, clinical features and management lateral venous thrombosis.
- 30. Discuss aetiopathology of subglottic stenosis and describe the recent available management.
- 31. Describe the clinical features, classification and management of glomus jugulare.
- 32. Discuss Rhinosporidiosis and its management.
- 33. Write short notes on:
  - a)Dysphagia lusoria
  - b) Cochlear microphonics
  - c) Gradenigo syndrome
- 34. Discuss pre and post operative complications and its management in modified radical mastoidectomy.
- 35. Discuss management of a 40 years old lady with giddiness of 6 months duration.
- 36. Discuss the role of laser in ENT diseases management...
- 10. What is microdebrider? Discuss its applications in ENT surgeries.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Histology of Suprarenal gland
- 29. Epithelial lining of GIT and its functional adaptation
- 30. Lymphocyte culture and karyotype preparation.
- 31. Sex Chromatin
- 32. Fixatives
- 33. Enumerate various serous glands. Give the histological structure of typical serous gland.
- 34. Mounting of specimens for museum.
- 35. Banding techniques in Chromosomal staining.
- 36. Microscopic structure of kidney
- 10. H and E staining.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Vaccines in leprosy.
- 38. Newer anti leprosy drugs.
- 39. Syndromic management of genital ulcer disease.
- 40. Silent neuritis.
- 41. Morphological index.
- 42. Pearly penile papules.
- 43. Malignant syphilis
- 44. Esthiomene.
- 45. Reversal reactions in Leprosy.
- 10. Eosinophilic folliculitis.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 HOSPITAL ADMINISTRATION

## Paper-III— Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What are the general planning considerations for hospital commissioning? Describe the stages or phases in planning a 500 bedded General Hospital.
- 2. Medical insurance
- 3. Describe the planning considerations for the operation theatre complex for a Super Specialty Hospital.
- 4. What is Regionalization of services? Describe the regionalization systems available at the medical & Health services in the State Govt. of A.P?
- 5. Changing role of hospital administrator
- 6. Describe the planning and organizing a mother and child care unit for general hospital.
- 7. Briefly mention the planning specifications for psychiatry services of general teaching hospital.
- 8. Accreditation of hospitals.
- 9. How do you handle brought dead case in the accident and emergency department? Mention the planning principles for mortuary services in the Government General Hospital.
- 10. Write the principles of 'Green Hospitals' buildings -

## GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 2. Discuss the normal lobar functions of the cerebrum and their abnormalities?
- 2. Portal systemic Anastomoses
- 3. Discuss the various serological tests used in the diagnosis of infectious diseases?
- 4. Describe the physiology and interpret various abnormalities of seminal fluid.
- 5. Mention the muscles connecting the upper limb
  - a) To the thoracic wall
  - b) To the vertebral column there actions and nerve root value?
- 6. Pathophysiology of heart failure.
- 7. Blood supply of spinal cord and its clinical significance
- 8. Application of evidence based medicine
- 9. Laboratory investigations in malabsorption syndromes
- 10. Biomarkers in disease.

## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Lymphatic drainage of vulva
- 47. Physiology of puberty
- 48. Medical abortion
- 49. Coagulation failure in obstetrics
- 50. Screening for gestational diabetes.
- 51. Describe fetu –placental circulation. What are the maternal and fetal vascular adaptation structured by ultrasound to predict foetal well being?
- 52. What is the Pathology of benign and malignant gestational trophoblastic diseases?
- 53. What is pap smear?
- 54. Discuss the etiopathogenesis of endometriosis
- 10. Write short notes on
  - a) X Chromosome
  - b) Student chi square test.

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## **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions.

All questions carry equal marks.

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. How is normal respiration regulated? What are the important differences between mechanics of normal and conventional intermittent positive pressure mechanical ventilation?
- 47. Analyze clinical relevance of physiological factors influencing cardiac output.
- 48. Discuss clinical utility of components of ABG (arterial blood gas) analysis report.
- 49. Discuss clinical utility of microbiological tools to diagnose Paediatric HIV.
- 50. What are the principles of rational selection of antibacterial drugs?
- 51. Write investigative approach for a child with Hemolytic Anemia.
- 52. Pathophysiology of diabetic ketoacidosis.
- 53. Laboratory investigations with interpretation for a child with Arthritis.
- 54. Recombinant DNA technology and its application in Pediatrics.
- 10. Write short notes on
  - a) Liver function tests in extra hepatic biliary atresia.
  - b)Thyroid function tests cord blood, day 1 and day 3.
  - c) Renal function test (i) ATN (ii) Acute cortical necrosis.
  - d) CSF findings in TB meningitis.
  - e) Investigations in addission's disease.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. What is ICT and mention reasons for raised ICT?
- 47. Edmund Gaskin Boyles
- 48. What are opioid receptors, their function and distribution?
- 49. Principles of blood gas analyzer and give a typical reading
- 50. Give an account of newer muscle relaxants and their use?
- 51. What are various liver function tests?
- 52. How do you measure cardiac output various clinical situations?
- 53. Compare the foetal circulation to circulation in 2 months baby
- 54. Describe factors that influence the uptake of inhalational agents?
- 10. What are coagulation factors and their effects on patient in their absence?

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Molecular diagnosis of genetic diseases
- 48. Pathophysiology of obesity and mention the consequences of obesity.
- 49. Describe the mechanism of metastasis with emphasis on recent concepts.
- 50. Describe the pathophysiology of D.I.C.
- 51. Discuss the experimental aspect and recent advances in repair.
- 52. Cytoskeleton in health and disease.
- 53. Endotoxic shock.
- 54. Discuss the pathophysiology and complications of thromboembolism.
- 55. Write in detail the radiation injury.
- 10. Host prosthetic interaction.

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions
All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Describe the radiological anatomy of esophagus. Discuss the investigations of esophagus.
- 48. Describe the ultrasound contrast media. Mention the physical principles and clinical applications of ultrasound contrast media.
- 49. Draw and label diagram of modern-image-intensifier. Discuss the functions of each part and mention advantages.
- 50. How will you plan the Radiology department as per the specifications of BARC.
- 51. Describe the anatomy of subarachnoid cisterns. Discuss various methods of imaging in suspected case of hydrocephalus.
- 52. Describe the anatomy of peritoneum and retroperitoneal spaces
- 53. Discuss the embryology of heart with relation to congenital heart disease.
- 54. What are the newer MRI sequences
- 55. Discuss the pathophysiology of contrast induced reactions.
- 10. Biological effects of Radiation.

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Development of Lung and developmental anomalies.
- 47. Methods of measuring diffusion capacity.
- 48. Defenses of the respiratory tract
- 49. Alveolar monophagia
- 50. Vancomycin
- 51. Applied anatomy of Broncho Pulmonary districts.
- 52. Pathogenesis of Obstructive Sleep Apnea.
- 53. Leukotriene Inhibiters.
- 54. Acid-Base balance in respiratory diseases.
- 10. Immuno Pathogenesis of TB.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the methods of gene transfer in bacteria.
- 47. Describe the gel precipitation tests
- 48. Discuss the functioning of CSSD in tertiary care hospital
- 49. Discuss and classify hypersensitivity. Discuss type- I hypersensitivity.
- 50. Give an account of role of T lymphocyte.
- 51. Discuss bacterial fimbriae.
- 52. List cytokines. Discuss interleukins and their applications.
- 53. Extended spectrum Beta lactamases.
- 54. Chemical disinfectants
- 10. Nobel laureates in Microbiology.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

46. Discuss the man made disasters. Add a note on triage.

- 47. Principles of Health Communication
- 48. Discuss the role of family in health and disease
- 49. Levels of prevention and modes of intervention.
- 50. Components of health information system and uses of health information.
- 51. Globalization effect an health.
- 52. Role of Panchayats in health care.
- 53. Briefly discuss the ecology of malnutrition in India.
- 54. Discuss the role of Chi-square test in biomedical research
- 10. Time trends in disease recurrence

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the contributions of Philippe Pinel and Esquire towards making psychiatry a medical specialty?
- 47. The role of psychiatrist in general hospital psychiatry?
- 48. Relevance of HPA axis in the causation of various psychiatric syndromes?
- 49. Describe the connections and functions of Dorso lateral frontal cortex.
- 50. What are various steps in the planning a psychiatric epidemiological survey?
- 51. What is Ethology and describe its contribution in understanding human psychology?
- 52. Describe the tests for conceptual disorganization.
- 53. What is personality and describe at least one personality theory?
- 54. Insight and its relevant to the outcome of psychiatric disorders?
- 10. Neurotransmitters and signaling?

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Explain the general laws of thermodynamics. Give four examples for nucleotide triphosphates.
- 47. Give an account of standard deviation (S.D), standard error of mean (S.E), P distribution and regression are useful in research in the field of biochemistry.
- 48. What are the types of centrifugation? Describe the uses of ultra centrifugation.
- 49. What is Beer Lambert's law? What is the difference between a calorimeter and spectrophotometer?
- 50. Classify enzymes. Discuss the importance of three enzymes in clinical practice.
- 51. Describe in detail oxidative phosphorylation with necessary diagrams.
- 52. Write short notes on
  - a) Acute phase reactants
  - b) Henderson Hasselbalch equation
- 53. Discuss the various types of phospholipids and their function and structure.
- 54. High energy bonds and compounds in Cellular Metabolism.
- 10.Describe the application of radioisotopes in the study of metabolic pathways. How is radioactivity measured?

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Presynaptic receptors.
- 47. Pharmacogenetics
- 48. Pathophysiology of Renal Hypertension
- 49. Importance of intrinsic factor in Megaloblastic anemia
- 50. Bioassay '4' point
- 51. Chi square test
- 52. Pharmacokinetics of drugs in elderly
- 53. H.P.L.C
- 54. Inhalation route in drug delivery
- 10. Use of inbreed strains of animals for experimentation.

## M.D. DEGREE INTERNAL EXAMINATION - JUNE, 2012

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Write about etiology, clinical diagnosis and pathology of acute pancreatitis. Add a note on autopsy findings.
- 47. Describe membrane physiology in brief. How is it relevant to Forensic Medicine?
- 48. Describe the development, morphology, structure and exception of permanent teeth. How does this knowledge help in age assessment? Add a note on Gustafson's formula.
- 49. Describe in brief the scope of Forensic Radiology
- 50. What is sexual dimorphism? How does the human skull show this phenomenon?
- 51. How do you estimate stature in mutilated bodies?
- 52. What are the sudden natural deaths? Explain the protocol for autopsy while approaching a case of sudden death.
- 53. Mention the incisions at Medico legal autopsy. Write about dissecting the heart and its reasons.
- 54. Describe the physiology of foetal blood circulation.
- 10. What is superimposition? Write the techniques and types of superimposition and its advantages and disadvantages.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Discuss about polymerase chain reactions (PCR) and DNA micro array techniques.
- 47. Calcium oscillations and its importance in cell signalling
- 48. ABC transporters
- 49. Cytokine network in intercellular communications.
- 50. Stochasticity in gene expression
- 51. Interferons
- 52. Body fluid measurements
- 53. Nernst equation
- 54. Homeostasis
- 10. Nerve injury

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 RADIOTHERAPY

PAPER-I: BASIC SCIENCES, RADIATION PHYSICS

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Describe the radio biologic rationale of fractionation in radiotherapy.
- 29. Describe the lymphatic drainage of tongue. Mention the acute and late effects observed following radical radiation treatment of head and neck cancers.
- 30. Quality assurance in Radiotherapy.
- 31. Para-aortic Lymph Node evaluation.
- 32. Discuss in detail regarding the techniques used in screening of carcinoma cervix.
- 33. Outline what are early and late reacting tissues and discuss the Linear Quadratic model along with its clinical significance.
- 34. Compensators in radiotherapy
- 35.CSF Pathway.
- 36. Discuss the "WHO Ladder" of pain management in cancer.
- Describe the mediastinal anatomy and various lesions seen in mediastinum.

## M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the development of testes and congenital abnormalities.
- 47. Acid base balance
- 48. Classify Haemorrhage. Describe how do you manage reactionary haemorrhage in thyroid surgery.
- 49. Describe histology of lymph node, formation and functions of lymph.
- 50. Write notes on blood supply of colon. Enumerate the precancerous conditions of colon and describe the pathology of colonic malignancies.
- 51. Describe the surgical anatomy of the kidney and the fascial coverings. What is crossed dystopia?
- 52. Describe the formation of brachial plexus. Write brief notes on various brachial plexus lesions.
- 53. Describe the circle of Willis and discuss briefly on aetio-pathogenesis of intracranial tension.
- 54. Describe histology of skin, pathophysiology of burns and skin grafting
- 10. Calcitonin

## M.S. DEGREE INTERNAL EXAMINATION - JUNE, 2012

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 54. Describe the arches of foot and discuss mechanics in relation to pes planus and pes cavus.
- 55. Blood supply of Talus
- 56. Anatomy of Brachial plexus and course and supply of radial nerve
- 57. Describe clinical features and management of fat embolism.
- 58. Fracture healing and factors influencing the union.
- 59. Carpal tunnel
- 60. Diagnostic tests in musculoskeletal Tuberculosis
- 61. Fluid balance in poly trauma patient
- 62. Bone Cement
- 10. 3 Dimensional computerized tomogram.

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Anatomic relations of optic chiasma-clinical importance
- 48. Concepts of binocular vision and ARC
- 49. HLA antigens and the eye
- 50. Direct and indirect gonioscopy
- 51. Optics and uses of low vision aids
- 52. Describe the anatomy course and relations of III cranial nerve and describe the syndromes associated with its Palsy.
- 53. Describe the physiology of accommodation and its anomalies.
- 54. Describe the morphological features of mycobacterium tuberculosis and its ocular manifestations.
- 55. Describe the histopathological features of lacrimal gland tumours.
- 10. Write short notes on
  - a) Prisms in Ophthalmology
  - b) Limbal stem cell
  - c) Drug delivery to the eyes
  - d) Antimetabolites

### M.S. DEGREE INTERNAL EXAMINATION - JUNE, 2012

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the anatomy of petrous temporal bone.
- 47. Describe various muscular triangles of neck.
- 48. Describe the anatomy of submandibular salivary gland. Add a note on physiology of its secretion.
- 49. Describe the development of tonsil. Write about different surgical approaches to oropharynx.
- 50. Describe the anatomy of cerebellopontine angle and its surgical importance.
- 51. Describe about mechanism of phonation and theories of phonation.
- 52. Describe physiology of deglutition.
- 53. Discuss physiology of smell and causes of altered sensation of smell.
- 54. Discuss the anatomy of soft palate and the impact of its developmental anomalies on ear, nose and throat region
- 10. Write short notes on
  - a) Epstein Barr virus
  - b) Corinne bacterium Diphtheriae.
  - c) Impedance Audiometry
  - d) Dix Hallpike maneuver

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Lymphatic drainage and gross anatomy of mammary gland
- 47. Write briefly about Epiphyses.
- 48. Porto caval anastomoses and its applied aspects
- 49. Name all dural venous sinuses. Write briefly about cavernous sinus and its applied aspects.
- 50. Bronchopulmonary segments and its applied aspects.
- 51. Autonomic innervation of lower limb and applied anatomy
- 52. Surgical spaces of the hand.
- 53. Describe the boundaries, contents and applied anatomy of superior mediastinum.
- 54. Anal canal
- 10. Write briefly notes on
  - a) Spermatogenesis
  - b) Notochord.

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

### D.V.L.

### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe Dermoepidermal junction and its clinical applications.
- 47. Cyto diagnosis
- 48. Mucosal defense mechanism.
- 49. Penicillins in syphilis and gonorrhoeae.
- 50. Immunology of HIV.
- 51. Neurophysiology of Itch
- 52. Lymph nodes in STD
- 53. Thalidomide in C thalidomide
- 54. Discuss Hair in health and disease
- 10. Meckel cell

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012

#### HOSPITAL ADMINISTRATION

## Paper-I – GENERAL ADMINISTRATION AND MANAGEMEMNT IN HOSPITAL FIELD

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Briefly describe the Henri Fayol's principles and narrate with hospital application?
- 11. Describe the Hawthorne experiments and the implications to the management.
- 12. What are the managerial skills required to lead the hospital organization at various levels Discuss.
- 13. Economic Order Quantity
- 14. As an administrator of the hospital, how do you organize the 'Delegation of the Authority' for day to operations and discuss limitations.
- 15. Define leadership? Discuss the competencies of leadership? Classify the leadership theories?
- 16. Decision tree analysis
- 17. Define MBO? Discuss the process of MBO? What are the limitations?
- 18. How do you describe the communication process and narrate the communications barriers?
- 10. Enumerate Mintz berg's managerial roles -

### **GENERAL MEDICINE**

Paper-III – Disorders of Immune system connective tissue &joints, endocrinology and metabolism, Neurological, poisoning etc., Oncology & Hematology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Recent advances in management of Parkinson's diseases.
- 38. Hypoglycaemia
- 39. Current treatment of Rheumatoid arthritis.
- 40. Recent concepts in the management porphyrias.
- 41. Myelofibrosis
- 42. Anagrelide.
- 43. Acute myeloblastic leukaemia
- 44. Organophosphorus poisoning.
- 45. Immune Reconstitution syndrome.
- 10. Evaluation of hypothyroidism.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 OBSTETRICS & GYNAECOLOGY

### Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe Pelvic organ prolapse quantification scoring system and indications of surgical management of prolapse.
- 38. Describe types of endometrial hyperplasia and selection criteria for endometrial ablation.
- 39. Complications of ovarian neoplasms.
- 40. Describe staging of carcinoma cervix and management of Microinvasive carcinoma.
- 41. Double puncture laparoscopy.
- 42. Medical eligibility criteria for combined oral contraceptives.
- 43. Colposcopy.
- 44. "EAMCO" regimen in chorio carcinoma.
- 45. Tests for tubal patency in a cen of infertility
- 10. Indications for hysterectomy.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Current recommendation in complementary feeding.
- 38. Diagnostic evaluation of child suspected to have immune deficiency.
- 39. Omega 3 fatty acids and their role in infant nutrition.
- 40. Clinical features, management of complication of nutritional rickets in children.
- 41. Etiology, clinical manifestations, diagnosis, complications and management of dengue haemorrhagic fever.
- 42.a) Bornholm disease
  - b) Acute hepatic gingivo stomatitis.
- 43. Clinical features and management of leptospirosis.
- 44. Diagnostic approach to a child with Pyrexia of unknown origin.
- 45. Nutritional management of critically ill child.
- 10. Discuss the benefits and risks of bone marrow transplantation in children.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Describe the anaesthetic management of an Acute Liver Failure (ALF) patient posted for an incidental surgery.
- 39. Anaesthetic management of a neonate posted for pyloromyotomy.
- 40. Write a note on "Stress of Anaesthesia" in an anaesthesiologist.
- 41. Discuss the preoperative lung function tests for a case posted for pneumonectomy.
- 42. Discuss the systemic changes and problems of pneumoperitoneum during Laparoscopic surgery.
- 43. Outline the anaesthetic management of a 60 years old man with hypertension posted for TURP (Transurethral resection of prostate).
- 44. Write briefly about problems and anaesthesia management for Tracheo Esophageal fistula repair. (Neonate of age 24 hours).
- 45. Anaesthesia considerations for patients with psychiatric disorders.
- 46. Patient controlled analgesia.
- 10. Anaesthesia management for liposuction in a morbidly obese patient.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Molecular cytogenetics of hematological malignancies.
- 39. Discuss the role of red cell cytochemistry in hematological disorders.
- 40. Problems in paediatric blood transfusions.
- 41. Discuss the role of urinary sediment examination in renal diseases.
- 42. Automation in clinical pathology
- 43. Outline the plan of laboratory investigations in coma
- 44. Discuss the preparation of cellblock and its use as a diagnostic tool in cytology
- 45. Discuss utility of intra operative cytology in gynecological diseases
- 46. Describe the squash technique. Describe the squash cytology of CNS tumors .
- 10. Diagnostic utility of fraction of serum lipids.

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M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 RADIO DIAGNOSIS

Paper-III: Components of Radio diagnosis (Clinical radiology related to

Respiratory system, CVS, Musculoskeletal system and pediatrics)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Describe briefly the anatomy of the spinal canal and discuss the diagnostic procedures and radiological findings in any one pathological conduction.
- 39. Describe ultrasound features of anencephaly and holoprosencephaly.
- 40. Write short notes on:
  - c) Radionecrosis
  - d) Superior vena cava compression syndrome
- 41. Bronchial artery embolization.
- 42. Foregut Duplication Cysts.
- 43. CT difference between pleural effusion and ascites.
- 44. Write short notes on:
  - a) Actinomycosis of lung
  - b) Tracheoesophageal fistula.
- 45. Describe the role of ultrasound in thorax (extra cardiac lesions).
- 46. Describe the technique of Arch aortogram. Mention the indications and complications of aortogram.
- 10. Describe the radiological features of bronchogenic carcinoma.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Discuss Ventilator associated Pneumonia.
- 39. Discuss Hepato pulmonary syndrome
- 40. Discuss systemic inflammation in COPD and serological markers
- 41. Approach to diagnosis of diffuse pulmonary parenchymal disease.
- 42. Primary tumors of Pleura
- 43. Management of acute severe asthma in a 40 year old man
- 44. Effects of toxic fume inhalation.
- 45. Management of Lung abscess
- 46. Management of Post operative atelectasis
- 10. Tension Pneumothorax

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe the structure of rabies virus. Discuss the immunoprophylaxes of rabies.
- 38. What is SARS and discuss in detail about its Epidemiology.
- 39. Classify viral hemorrhagic fever and discuss in detail about Crimean Congo fever.
- 40. What is mycetism and discuss in detail about fungal poisoning.
- 41.List the parasites and fungi associated with HIV (Human Immunodeficiency Virus) infection. Describe the methods of demonstration of pneumocystis.
- 42. Classify tinea nematodes and describe the morphology life cycle of Dracunculus medinensis.
- 43. Cryptococcosis
- 44. How do classify viruses based on tropism and describe among one of the neurotropic viruses.
- 45. Classify oncogenic viruses and describe in detail about EB virus.
- 10. Eradication of Malaria Discuss.

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Define Maternal mortality ratio. Mention the interventions that promote the welfare and affect the health of mothers in India. Discuss any one of these interventions in detail.
- 38. What is Anaemia during pregnancy? What are the principles underlying the Anaemia prophylaxis? How is anaemia being managed in the community?
- 39. What is the scientific basis for changing the constituents of ORS by WHO recently? Why is ORS considered one of the best scientific advances by Lancet? Discuss the role ORT in community with a focus on "ORT-corner".
- 40. How is SAM different from the usual PEM? What is the scientific basis for recent changes in the mode of assessment of nutritional status by WHO.
- 41. Define population Explosion. What are the principles involved in achieving population stabilization along with NRR 1 and TFR 2.1.
- 42. How is sex ratio relevant in the context of national development? Discuss briefly the legislative action that took concrete shape in India in the context of sex ratio.
- 43. Define potable water. Mention the characteristics of potable water. How is govt. is trying to provide potable water to the rural and tribal people in India?
- 44. Write in the form of a table different categories of wastes. How are wastes being disposed of in primary health centers and sub centers.

- 45. What are green house effects and global warming. What are the effects of global warming on diseases? Discuss our role as doctors in the community to manage global warming?
- 10. Define ergonomics. What are the principles involved in ergonomics? Discuss the role of ergonomics in the management of Anthracosis.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Cardiac side effects of Psychotropic medication
- 38. Future directions in Psychiatric classification
- 39. Use of Psychotropic medication in renal impairment patients.
- 40. Pseudobulbar palsy
- 41. Borderline personality disorder with special reference to management issues.
- 42. Subcortical dementias
- 43. Evaluation and management of resistant depression.
- 44. Sleep hygiene
- 45. Genetic counselling in schizophrenia
- 10. Newer addictions in adolescents.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 BIOCHEMISTRY

### Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Give in detail mechanism of Hormone action.
- 38. What is BMR? Factors effecting the BMR and its determination.
- 39. Give the pathway of Thyroid hormone.
- 40. Explain the differences and types of protein energy malnutrition.
- 41. Describe the actions of Medullary hormones
- 42. Fiber diet and its functions.
- 43. Second messengers in detail and functions.
- 44. Essential fatty acids and functions.
- 45. Hormones as tumour markers.
- 10. Specific dynamic action and its variations in diseased conditions.

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Role of Iodides in thyroid disorders.
- 47. Deflazacort
- 48. Drug therapy of MDR TB
- 49. Monobactams
- 50. Nitroimidazoles
- 51. Antiplatelet agents
- 52. Role of incretins in type II DM
- 53. Imatinib Mesylate
- 54. Uses and misuses of anabolic steroids
- 10. HAART

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 FORENSIC MEDICINE

### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Discuss about dying declaration and its legal issues.
- 38. Discuss about medicolegal importance of hair.
- 39. Describe the recent amendment of law pertaining to rape.
- 40. Describe the role of Photography in Forensic Medicine.
- 41. Discuss the functions of Forensic science laboratory.
- 42. Describe the changes takes place in a newborn.
- 43. Discuss about the mechanism of aircraft injuries.
- 44. Describe the type of restraint of insane
- 45. Briefly discuss about Medical negligence
- 10. Describe about the postmortem changes in a case of electrical burns.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Define reflexes and classify reflexes
- 47. Define synapses and classify synapses and explain the properties of it.
- 48. Define cardiac output, describe the methods of cardiac output.
- 49. Coronary circulation
- 50. Regulation of respiration neuronal or chemical.
- 51. Artificial respiration
- 52. Define hypoxia and classify hypoxia.
- 53. Draw labeled diagram of visual pathway and explain its abnormalities.
- 54. Hearing Mechanism.
- 10. Taste pathway.

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 RADIOTHERAPY

Paper-III: Gynecological Malignancies, GI Malignancies, Hepatobiliary, Uro Genital, Bone Tumours, Soft issues Skin and Appendages, Benign Tumours

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. What do you understand by the term Dose volume histogram? Discuss its clinical significance.
- 11. Discuss the role of radiation in the management of carcinoma stomach and the techniques used.
- 12. Write briefly on AIDS related cancers.
- 13. Concurrent Chemo-radiotherapy in Ca. Rectum.
- 14. How do you manage a patient with Ewing's sarcoma of right Clavicle.
- 15. Premalignant lesions of skin and sequelae of skin irradiation.
- 16. Management of stage I uterine Cervix in a 35 years female
- 17. Radiotherapy in Cutaneous T-cell lymphomas.
- 18. Classify tumours of Testis and write management of localized seminoma.
- 10. Management of metastatic symptomatic Ca Prostate.

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Treatment of inoperable Ca. oesophagus.
- 38. Immediate and long term complications of Gastrectomy.
- 39. Aetiology, investigations and management of biliary strictures.
- 40. Management of stricture urethra
- 41. Role of flaps in general surgery.
- 42. Classify odontoma and describe the aetiology, pathogenesis, clinical features and treatment of adamantinoma
- 43. Describe the aetiology, clinical features and management of renal tuberculosis.
- 44. Discuss testicular tumours
- 45. Discuss hiatus hernia
- 10.Describe the development, clinical features and management of thyroglossal cyst.

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2012 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Developmental Dysplasia of hip and its management
- 38. Epiphyseal coxa vara and its management
- 39. Indications and surgical technique of triple arthrodesis of foot.
- 40. Aneurysmal bone cyst of upper tibia and its treatment
- 41. Foot wear in plantar ulceration for leprosy.
- 42. Causes, diagnosis and treatment of congenital wryneck.
- 43. Causes, diagnosis and surgical procedures for ulnar claw hand.
- 44. POHS Paraplegia
- 45. Multiple Exostosis, clinical manifestations and its complications.
- 10. Spondylolisthesis and its surgical correction.

### M.S. DEGREE INTERNAL EXAMINATION –JUNE, 2012 OPHTHALMOLOGY

Paper-III : Conjunctiva, cornea sclera, lens, glaucoma, uvea, retina, vitreous, squint.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Diagnosis and management of Normotensive glaucoma.
- 39. Systemic association of posterior uveitis.
- 40. Etiology and management of vertical gaze abnormalities
- 41. Trophic Keratitis
- 42. Management of Pediatric cataract.
- 43. Discuss ocular allergy and explain the recent trends in the management.
- 44. Explain recent techniques of Keratoplasty.
- 45. Implantable contact lenses in the treatment of Myopia
- 46. Recent advances of age related macular degeneration
- 10. Explain Nystagmus and management

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe in detail the various types of "FLAPS' used in head and neck surgery.
- 38. Describe the aetiopathology, clinical features and management lateral venous thrombosis.
- 39. Discuss aetiopathology of subglottic stenosis and describe the recent available management.
- 40. Describe the clinical features, classification and management of glomus jugulare.
- 41. Discuss Rhinosporidiosis and its management.
- 42. Write short notes on:
  - a)Dysphagia lusoria
  - b) Cochlear microphonics
  - c) Gradenigo syndrome
- 43. Discuss pre and post operative complications and its management in modified radical mastoidectomy.
- 44. Discuss management of a 40 years old lady with giddiness of 6 months duration.
- 45. Discuss the role of laser in ENT diseases management...
- 10. What is microdebrider? Discuss its applications in ENT surgeries.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Histology of Suprarenal gland
- 38. Epithelial lining of GIT and its functional adaptation
- 39. Lymphocyte culture and karyotype preparation.
- 40. Sex Chromatin
- 41. Fixatives
- 42. Enumerate various serous glands. Give the histological structure of typical serous gland.
- 43. Mounting of specimens for museum.
- 44. Banding techniques in Chromosomal staining.
- 45. Microscopic structure of kidney
- 10. H and E staining.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2012 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Vaccines in leprosy.
- 47. Newer anti leprosy drugs.
- 48. Syndromic management of genital ulcer disease.
- 49. Silent neuritis.
- 50. Morphological index.
- 51. Pearly penile papules.
- 52. Malignant syphilis
- 53. Esthiomene.
- 54. Reversal reactions in Leprosy.
- 10. Eosinophilic folliculitis.

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2012 HOSPITAL ADMINISTRATION

### Paper-III— Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. What are the general planning considerations for hospital commissioning? Describe the stages or phases in planning a 500 bedded General Hospital.
- 20. Medical insurance
- 21. Describe the planning considerations for the operation theatre complex for a Super Specialty Hospital.
- 22. What is Regionalization of services? Describe the regionalization systems available at the medical & Health services in the State Govt. of A.P?
- 23. Changing role of hospital administrator
- 24. Describe the planning and organizing a mother and child care unit for general hospital.
- 25. Briefly mention the planning specifications for psychiatry services of general teaching hospital.
- 26. Accreditation of hospitals.
- 27. How do you handle brought dead case in the accident and emergency department? Mention the planning principles for mortuary services in the Government General Hospital.
- 10. Write the principles of 'Green Hospitals' buildings -

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M.D. DEGREE EXAMINATION – OCTOBER, 2012

GENERAL MEDICINE Paper-I – Basic Medical Sciences Time: 3 Hours Max. Marks: 100

Note: Answer all questions

### All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Structure of Nephron with channels
- 2. Neurotransmitters
- 3. Genetics in hypertrophic cardiomyopathy
- 4. Impaired glucose tolerance
- 5. Physiology of weight regulation
- 6. Autoimmune Thyroiditis
- 7. Hyponatremia
- 8. Stem cell transplantation
- 9. Investigations in Cholestatic Jaundice
- 10. Andropause

### M.S. DEGREE EXAMINATION – OCTOBER, 2012

# OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Describe the development of uterus and its anomalies.
- 56. Describe the physiology of micturition and medical management of incontinence of urine.
- 57. Describe the cardiovascular changes in pregnancy. What are the difficulties in the diagnosis of cardiac disease in pregnancy?
- 58. Discuss the usage of prostaglandins in obstetric practice.
- 59. What are the organisms responsible for urinary tract infection (UTI)? What are the effects of UTI on pregnancy? How will you treat UTI in pregnancy?
- 60. Describe the pathology of cancer of the cervix. What are the prognostic factors for cancer of the cervix?
- 61. Write short notes on:
  - a) Ultrasound markers of foetal aneuploidy
  - b) Prophylactic antibiotics in obstetrics.
- 62. Discuss placental hormones and their importance
- 63. Discuss tumour markers and their role in gynecological malignancies.
- 64. Write short notes on:
  - a) Use of nifedipine in obstetrics
  - b) Use of magnesium sulphate

### M.D. DEGREE EXAMINATION - OCTOBER, 2012

### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

### WRITE SHORT ESSAYS ON THE FOLLOWING:

55. Pathophysiology of body fluids and its clinical application.

- 56. Lung function tests
- 57. Anti malarial drugs and current therapy of malaria.
- 58. Patho physiology of Acute Glomerulo Nephritis.
- 59. Bilirubin Metabolism.
- 60. Principles of Collagen Vascular Diseases.
- 61.A) Fetal Circulation
  - B) Changes at Birth
- 62. Immunotherapy
- 63. Lab diagnosis of Leukemia
- 10. Diagnosis of Hypothyroidism.

### M.D. DEGREE EXAMINATION – OCTOBER, 2012 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Describe the arterial circulation of the heart with the aid of a diagram. Explain Goldman Cardiac Index and its importance to anesthetists.
- 56. What are the goals of Pre operative evaluation? Describe the pharmacology of commonly used pre anaesthetic agents.
- 57. Define and classify vaporizers. What are the physical principles involved in the process of vaporization?
- 58. Describe in detail the clinical and laboratory evaluation of acid aspiration syndrome and management.
- 59. Discuss the physiological changes during pregnancy and its relevance to the anesthesiologists.
- 60. Write the clinical presentation and treatment of over dosing with neuro muscular blocking drugs.
- 61. Describe the merits and demerits of spinal opiod drugs.
- 62. Discuss the clinical implications of pulmonary function tests.
- 63. Explain monitored anaesthesia care and its clinical application.
- 64. Mention the various gases used during laparoscopy. Discuss the merits and demerits of commonly used gases.

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### M.D. DEGREE EXAMINATION – OCTOBER, 2012

### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 56. Describe the role of leucocyte adhesion molecule in inflammatory response.
- 57. What is the pathology of Type I hypersensitivity reaction
- 58. Describe the orchestra of cyclins and cyclin dependant kinase
- 59. Describe the role of growth factors in wound healing
- 60. Describe the mechanism of metastatic signature
- 61. What are the adverse effects of ionizing radiation.
- 62. What is the role of reactive oxygen species in injury
- 63. Describe triple repeat mutations
- 64. Describe microbial carcinogenesis
- 65. Describe the role of telomerase in cell senescence

### M.D. DEGREE EXAMINATION – OCTOBER, 2012 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Role of Mast cells in pulmonary disease.
- 56.O<sub>2</sub> dissociation curve
- 57. Fissures of Lung
- 58. Tests of small airway function
- 59. Auto PEEP
- 60. Peripheral chemoreceptors
- 61. Reactive oxygen species
- 62. The "Indirect" radiological signs of collapse.
- 63. Broncho-alveolar lavage (BAL)
- 10.6 minute walk test (6MWT)

### M.D. DEGREE EXAMINATION – OCTOBER, 2012 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Fluorescent Microscopy.
- 56. Write in detail about Bacterial cell wall
- 57. Write in detail Sterilization controls.
- 58. Methods of Genes transfer in Bacteria
- 59. Anaerobic culture methods
- 60. Write in detail about immunological tolerance.
- 61. Antiglobulin test
- 62. Cytokines
- 63. Write an essay on 'T' lymphocytes.
- 10. Write an essay on monoclonal antibodies and its uses.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

55. Problem Based Learning

56. Sample Size Estimation

- 57. Concept of Normal Distribution
- 58. Role of Micronutrients in diet
- 59. National Family Health Survey III
- 60. Concept of information, education and communication
- 61. World Trade Agreement Effect on Health.
- 62. Social Anthropology
- 63. Role of NGOs in Health Care
- 10. Genetic Counseling

#### M.D. DEGREE EXAMINATION – OCTOBER, 2012 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Role of GABA in Psychiatry.
- 56. Nonparametric Statistics.
- 57. Cerebellum in Psychiatry
- 58. Ethics in Psychiatric Research
- 59. Genetics of Schizophrenia
- 60. Cognitive event related potentials
- 61. Projective psychological tests
- 62. Narcoanalysis
- 63. Rating Scales for depression
- 10. Transference in Psychotherapy

#### M.D. DEGREE EXAMINATION – OCTOBER, 2012 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Describe the methods for investigating metabolic pathways.
- 56. Describe the polymerase chain reaction and name its applications.
- 57. Define chromatography. Describe affinity chromatography and its applications.
- 58. Describe the competitive and non-competitive inhibition with the help of Lineweaver Burke plots.
- 59. Second messengers and G proteins.
- 60. Describe the optical arrangements in a single beam spectrophotometer and a double beam spectrophotometer.
- 61. Describe the principle of formation of polyacrylamide gel.
- 62. Derive Handerson Hasselbalch equation. Mention its applications.
- 63. Redox potential
- 10. Donnan membrane equilibrium.

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Pregnancy category D drugs
- 56. Enzyme linked receptors
- 57. Competitive antagonists
- 58. Methods to screen potential antiepileptic drugs
- 59. ANOVA
- 60. Essential drug concept
- 61. Factors affecting bioavailability
- 62. Meta analysis
- 63. In vitro models in toxicology
- 10. Pharmacovigilance

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Discuss in detail about the anatomy of circle of Willis.
- 56. Enumerate the Transfusion hazards.
- 57. Discuss the Physiology of Rigor mortis
- 58. Medico legal importance of dentition
- 59. Medico legal importance of various ages in forensic medicine
- 60. Discuss the role of diatoms in a case of drowning
- 61. Describe the positive signs of pregnancy.
- 62. Types of skull fractures and its importance
- 63. Discuss types of hymen and its significance
- 10. Inter sex and its medico legal importance

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Structure and functions of cell membrane, add a note on special features of RBC membrane.
- 56. Basic mechanisms to maintain homeostasis.
- 57. Distribution and measurement of body fluids.
- 58. Properties of nerve fibers.
- 59. Neurotrophins
- 60. Genesis of resting membrane potential
- 61. G-Proteins and G Protein diseases.
- 62. Axoplasmic transport
- 63. Intracellular calcium.
- 10. Role of radionuclides in muscle physiology.

### M.S. DEGREE EXAMINATION – OCTOBER, 2012 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Surgical anatomy of inguinal canal.
- 56. Surgical anatomy of Rectum.
- 57. Thyroid function tests.
- 58. Pain pathway.
- 59. Hypercalcemia.
- 60. Fracture healing.
- 61. Pathology of Thyroid cancer.
- 62. Monoclonal antibodies.
- 63. Pseudomonas aeruginosa
- 10. Antibiotic prophylaxis.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 63. Strength duration curve
- 64. Fanconi's syndrome
- 65. Alkaptonuria.
- 66. TB immunoassay
- 67. ASO titre
- 68. Congenital Pseudoarthrosis of tibia
- 69. H.O. Thomas
- 70. MRI & Orthopaedics.
- 71. Fat embolism
- 10. EMG

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 56. Describe the anatomy of extra ocular muscles and intra ocular muscles...
- 57. Describe the development of binocular vision.
- 58. Describe the histopathology of retinoblastoma. Add a note on its genetic transmission.
- 59. Describe the pathology of Iris nodules
- 60. Sterilization of IOL (Intra Ocular Lenses) and Ophthalmic surgical instruments.
- 61. Factors responsible for corneal transparency.
- 62. Describe the causes of hypopyon ulcer. Describe the morphology, staining characteristics and lesions caused by Pseudomonas Pyocyanea.
- 63. Anti Glaucoma Drugs
- 64. Lab Diagnostic approach to corneal ulcer. Describe the investigations Laboratory for the diagnosis of a case of corneal ulcer.
- 65. Histology of Macula.

#### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Describe the course of recurrent laryngeal nerve and its embryological and surgical importance.
- 56. Describe the boundaries of cerebellopontine angle and its surgical significance.
- 57. Bronchopulmonary segments
- 58. Mechanism of mucociliary pattern of mucosa of nose and paranasal sinuses.
- 59. Hypotensive anaesthesia in ENT surgeries
- 60. Mucosal folds of middle ear and its clinical importance.
- 61. Development of larynx
- 62. Vestibular pathway and its central connections
- 63. Aspergillosis
- 10. IMRT/IGRT

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Thyroid Gland
- 56. Middle Ear Cavity
- 57. Sub Diaphragmatic Peritoneal Recesses.
- 58. Naso Pharynx.
- 59. Lacrimal Apparatus.
- 60. Shoulder Joint
- 61. Venous Drainage of Lower Limb
- 62. Inguinal Canal and its surgical importance
- 63. Pericardium
- 10. Adductor Canal.

#### D.V.L.

#### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Giant cells in dermatology
- 56. Cutaneous microabscesses
- 57. Evidence based Dermatology
- 58. Lymphatic drainage of female genitalia.
- 59. Prick test.
- 60. Nerve biopsy.
- 61. Gene therapy
- 62. Poikiloderma
- 63. Proteoglycans
- 10. Cornified envelope

#### GENERAL MEDICINE

Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Hypertension management in elderly
- 39. Brittle Asthma
- 40.H Pylori
- 41. Posterior Circulation Infarct
- 42. Pegylated Interferon
- 43. Somatostatinomas
- 44. Management of pulmonary hypertension
- 45. Approach to acute Nephritic syndrome.
- 46. Restless legs syndrome
- 10. Management of recurrent variceal bleed.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2012 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Discuss the problems and management of "early-onset" preeclampsia
- 38. What are the causes of post partum psychoses? Outline the management.
- 39. Discuss the aetiology and management of preterm premature rupture of membranes.
- 40. Write short notes on:
  - a) Modified biophysical profile
  - b) Pulmonary surfactant
- 41. Discuss the management of complications of Abruptio placentae.
- 42. Discuss the causes and management of "very low birth-weight" new born.
- 43. What is interventional sonography and its role in obstetrics.
- 44. What are the indications for caesarean section in twin pregnancy? Outline the intrapartum management of twin pregnancy.
- 45. Discuss the management of Diabetes mellitus complicating pregnancy.
- 46. Write short notes on:
  - a) Ventouse delivery
  - b) Surgery for atonic postpartum haemorrhage.

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Complications of Prematurity
- 48. Management of Rh Incompatibility
- 49. Aetiology, clinical features of Kernicterus and its prevention.
- 50. Pattern of sleep disorders in children.
- 51. Factors affecting Growth and Development.
- 52.A) What do you mean by Growth Curves?
  - B) Describe briefly lymphoid growth curve.
- 53. Autistic Child
- 54. Newer Vaccines
- 55. National Rural Health Mission
- 56. Aetiology and management of neonatal meningitis

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 39. What you mean by the term Golden Hour, Platinum Hour and Silver Day in trauma? Explain the role of the anesthetists in trauma care.
- 40. Write about the WHO (World Health Organization) regimen for chronic pain management.
- 41. Discuss about the nutrition to the patient on long term ventilator in critical care unit.
- 42. Write briefly about Thromboelastoplasty and its importance in anaesthesia.
- 43. Describe the anaesthetic services in day care surgery. Briefly mention the selection and discharge criteria for day care anaesthesia patients.
- 44. Discuss the use of Ultra Sound in various areas in anaesthesia.
- 45. Discuss the current concepts and modified guidelines of cardio pulmonary cerebral resuscitation.
- 46. Describe the management of a patient with pesticide poisoning in the intensive care unit.
- 47. Role of anesthesiologists in managing mass causalities.
- 48. What is minimum monitoring standards? Describe the objectives and methods.

## M.D. DEGREE EXAMINATION – OCTOBER, 2012 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe the pathology of complications of diabetes mellitus
- 38. Discuss the differential diagnosis of myo fibroblastic proliferations mimicking soft tissue sarcoma
- 39. Describe the pathology of inflammatory neuropathies.
- 40. Describe the pathology of neonatal cholestasis
- 41. Write about pathology of Rosai Dorfman syndrome
- 42. Describe the pathology of Nonalcoholic steatohepatitis
- 43. What are the prognostic factors of in-situ ductal carcinoma breast
- 44. Describe the genetic basis of colorectal carcinoma
- 45. Discuss the pathology of NK cell lymphoma
- 10. Describe asbestos related lung disease

#### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Treatment of Pulmonary Tuberculosis in pregnancy and lactation.
- 38. Lag period
- 39. DOTS Plus
- 40. Fallacies in interpretation of Tuberculin skin test
- 41. Open Negative Syndrome
- 42. Sequelae of TB meningitis
- 43. Epituberculosis
- 44. Diagnosis of Pediatric Tuberculosis
- 45. Abdominal tuberculosis Pathology and diagnosis
- 10. Chemoprophylaxis in tuberculosis

## M.D. DEGREE EXAMINATION – OCTOBER, 2012 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Write an essay on Non-sporing anaerobes.
- 39. Classify Vibrios. Write pathogenesis and laboratory diagnosis of Cholera.
- 40. Write in detail specific tests for Syphilis.
- 41. Legionella pneumophila.
- 42. Listeria Mono cytogenes.
- 43. Name the human diseases caused by Chlamydiae. Write pathogenesis and laboratory diagnosis of C. trachomatis.
- 44. Classify Clostridia. Describe in detail Tetanus.
- 45. Extra-pulmonary Tuberculosis.
- 46. Weil's disease
- 10. Write an essay on Mycoplasma causing human diseases.

## M.D. DEGREE EXAMINATION – OCTOBER, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 39. Discuss in brief the uses of epidemiology with suitable examples.
- 40. Discuss the design of Randomized Control Trial
- 41. Discuss the use of cluster sampling in coverage evaluation
- 42. Types of variables Quantitative & Qualitative
- 43. Elimination of Neonatal Tetanus in Andhra Pradesh
- 44. Strategy for Elimination of Measles from India.
- 45. Role of Surveillance in HIV / AIDS prevention.
- 46. National Cancer Control Programme
- 47. Epidemiology of Obesity
- 48. Epidemiological Transition

## M.D. DEGREE EXAMINATION – OCTOBER, 2012 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Soft neurological signs
- 38. Cardiac side effects of psychotropic drugs
- 39. Psychiatric complications of epilepsy
- 40. Psychiatric consequences of cancer
- 41. Narcolepsy
- 42. Polycystic ovary disease and Mental Health
- 43. Cannabis-related psychiatric disorder
- 44. Medication induced movement disorders
- 45. Wernicke's encephalopathy
- 10. CNS AIDS (Neuro AIDS) (AIDS Encephalopathy)

#### M.D. DEGREE EXAMINATION – OCTOBER, 2012 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Ionic properties of amino acids, peptides and proteins
- 39. Enzyme phosphorylation and dephosphorylation.
- 40. Interconversion of monosaccharides.
- 41. Protein breakdown and excretion of nitrogen.
- 42. Metabolism in fasting state
- 43. Regulation of glycolysis and gluconeogenesis
- 44. Immunoglobulins
- 45. General principles of protein folding.
- 46. Transport of glucose across membranes.
- 10. Metabolism of galactose and associated disorders.

#### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Epidural anesthesia
- 47. Drug therapy of Alzheimer's disease
- 48. Anti migraine agents.
- 49. Use of diuretics in different types of edema.
- 50. Phosphodiesterase III inhibitors
- 51. Drugs affecting QT interval.
- 52. Clinical applications of K<sub>+</sub> channel openers
- 53. Selective  $\beta_2$  agonists
- 54. Drugs affecting rennin angiotensin aldosterone system.
- 10. Gabapentin

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 48. Discuss the causes of sudden natural death from CVA
- 49. Discuss the pathophysiology of Atelectasis
- 50. Discuss the pathophysiology of fracture healing
- 51. Discuss the microbiological investigations in a case of chronic diarrhea
- 52. Discuss the Pathophysiology of death due to Bee sting
- 53. Discuss the differences between strychnine poisoning and tetanus
- 54. Discuss in detail cerebrovascular lesions resulting in sudden natural deaths
- 55. Discuss Rh incompatibility
- 56. Discuss the pathophysiology of extra dural haemorrhage
- 57. Prevention of nosocomial infection

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Mechanism of cellular immunity
- 47. Platelet function tests
- 48. Regulation of gastric secretion
- 49. Pancreatic juice composition and regulation
- 50. Control of testicular function.
- 51. Mechanism of micturition
- 52. Humoral regulation of serum calcium and consequences of hypocalcemia.
- 53. Physiological actions of growth hormone
- 54. Physiological changes during pregnancy
- 10. Natriuretic hormones.

## M.S. DEGREE EXAMINATION – OCTOBER, 2012 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Clinical features and management of Extra Dural Haemorrhage.
- 38. Le Fort's classification of Facio-Maxillary trauma and its management.
- 39. Describe the clinical features and management of pheochromocytoma
- 40. Discuss the clinical features, investigations and management of Gastro esophageal Reflux disease.
- 41. Discuss the clinical features and management of splenic injuries.
- 42. Write briefly the clinical features and management of Pseudo-cyst of pancreas.
- 43. Discuss the investigations and treatment options in testicular malignancies.
- 44. Discuss thoracic outlet syndrome.
- 45. Write briefly about TNM staging of Breast cancer and treatment options.
- 10. Discuss early and late complications of gastric surgery.

# M.S. DEGREE EXAMINATION OCTOBER, 2012 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 47. Recurrent patellar dislocation
- 48. Lower limb amputation
- 49. Erb's palsy
- 50. Classification of dislocation of hip and management of anterior dislocation
- 51. Blood supply of hip joint and management of fracture neck of femur in 55 year old male
- 52. Foot drop and management
- 53. Management of distal end of radius fractures.
- 54. Tourniquet palsy.
- 55. Ankle injuries
- 10. Cervical spine injuries.

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## M.S. DEGREE EXAMINATION – OCTOBER, 2012 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Ocular manifestations of mycobacterial infections.
- 39. Risk factors and clinical features of retinopathy of prematurity
- 40. Complications of Keratoplasty
- 41.AC/A Ration and AV Phenomenon
- 42. Vogt-Koyanagi Harada syndrome
- 43. Blindness in India.
- 44. Neovascular Glaucoma
- 45. Glaucoma implant surgery
- 46. Corneal Dystrophy
- 47. Principles of Squint Surgery.

#### 181-NR

## M.S. DEGREE EXAMINATION – OCTOBER, 2012 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Discuss etiopathogenesis, clinical features and investigations in otosclerosis.
- 39. Discuss about ototoxicity
- 40. Discuss about the differential diagnosis and management of solitary nodule thyroid.
- 41. Tubercular Laryngitis
- 42. Otitic Barotrauma
- 43. Describe the etiology, pathogenesis, clinical features and management of Atrophic Rhinitis
- 44. Pre Malignant lesions of Larynx
- 45. Rhinoscleroma
- 46. Retropharyngeal abscess
- 10. Frey's syndrome

## M.D. DEGREE EXAMINATION – OCTOBER, 2012 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Cranial Dural Folds
- 47. Carpometacarpal Joint of Thumb
- 48. Thoraco abdominal Diaphragm
- 49. Right Ureter
- 50. Ossification
- 51.Left Testis
- 52. Longitudinal Arches of Foot.
- 53. Labelled Diagram of Transverse sectional anatomy at L<sub>1</sub> vertebra.
- 54. Typical Intercostal space
- 10. Parotid Gland

#### D.V.L.

#### Paper-II

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Chronic paronychia
- 29. Role of Malassezia species in Dermatological disorders
- 30. Drug induced bullous eruptions
- 31. Cicatricial alopecia
- 32. Atypical psoriasis
- 33. Paraneoplastic pemphigus
- 34. Trichoepithelioma
- 35. Hypomelanosis of Ito.
- 36. Pseudolymphomas
- 10. Laser hair removal.

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Dermatological manifestations in chronic kidney disease.
- 47. Approach to malabsorption
- 48. Microvascular thrombotic crisis in SLE.
- 49. Ca channel disorder of muscle paralysis
- 50. Dementia
- 51. Fibromyalgia
- 52. Obstructive sleep apnoea
- 53. Endosulfan poisoning
- 54. Management in multiple sclerosis
- 10. Dyslipidemia in Diabetes Mellitus

## M.D. DEGREE EXAMINATION – OCTOBER, 2012 OBSTETRICS & GYNAECOLOGY

Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Discuss the management of genital prolapse in a 30 year old patient.
- 47. Discuss the management of persistent trophoblastic disease.
- 48. Discuss the diagnosis and treatment of polycystic ovarian syndrome.
- 49. Discuss the various methods of screening of cancer cervix.
- 50. Discuss the techniques of tubal recanalization and factors affecting the outcome.
- 51. What are the investigations and treatment of oligozoospermia?
- 52. What are barrier contraceptives? What is their role?
- 53. Write short notes on:
  - a) Non contraceptive benefits of intrauterine contraceptive devices.
  - b) Long term complications of female sterilization
- 54. Discuss the role of laparoscopy in gynaecological surgery.
- 10. Discuss the various investigations to diagnose infections in gynaecology.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2012 PAEDIATRICS

## Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Calculate a diet for 3 year old child and briefly discuss.
- 47. Management of Nutritional Anemia.
- 48. Clinical manifestations of cow milk protein allergy.
- 49. A) Clinical features of Hypovitaminosis A
  - B) Complications of Hypervitaminosis A
- 50. Diagnostic approach to fever of unknown origin
- 51. Management of Malaria.
- 52. Complement System.
- 53. Complications of Mumps Infection
- 54. Agranulocytosis
- 10. Management of Chronic Kidney diseases.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2012 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. What are the problems in anaesthetizing a patient with Ischemic heart disease. Discuss the management.
- 48. Discuss the various methods of post operative pain relief in paediatric surgery patients.
- 49. Describe the management of local anaesthetic toxicity.
- 50. What are the causes for delayed recovery from anaesthesia?
- 51. Classify the different hypotensive anaesthesia techniques. Mention the agents in common practice.
- 52. Discuss in detail the anaesthetic management of Myasthenia gravis patient posted for thymectomy.
- 53. Define morbid obesity. What are the problems in anaesthetizing such patients.
- 54. Discuss the anaesthetic services for electro convulsive therapy and mention the complications to the patient.
- 55.40 years old female patient weighing 120kg is posted for laparoscopic Cholecystectomy. Discuss the problems and anaesthetic management.
- 56. Discuss the anesthetic consideration for surgery on the spine.

#### M.D. DEGREE EXAMINATION OCTOBER, 2012 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Write about the molecular basis of acute promyelocytic leukemia
- 48. What is the role of buffy coat preparation in hematology
- 49. Write about the significance of immature platelet fractions
- 50. Write about the principle and interpretation of osmotic fragility test.
- 51. Describe the formed elements in urine
- 52. Describe the cytologic techniques in respiratory tract pathology
- 53. What are the prognostic factors of Acute lymphoblastic leukemias
- 54. Write about the diagnostic criteria for myeloma
- 55. Describe the complications of blood transfusion.
- 56. Write about the pathogenesis of Myelofibrosis

#### M.D. DEGREE EXAMINATION – OCTOBER, 2012 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Pulmonary manifestations in rheumatoid arthritis
- 48. Evaluation of impairment and disability due to lung diseases
- 49. Cystic fibrosis the genetic defect
- 50. Roflumilast
- 51. Para malignant pleural effusion
- 52. Tropical pulmonary eosinophilia
- 53. Thoracic sarcoidosis
- 54. Systemic complications of sleep apnoea syndrome
- 55. Difficult to control asthma
- 56. Primary pulmonary hypertension

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Write an essay on viral replication.
- 47. Classify Herpes viruses. Describe in detail H. Simplex virus.
- 48. Classify Arboviruses. Describe briefly Arboviral diseases seen in India.
- 49. Name the viruses infecting the Liver. Describe in detail Hepatitis 'B' virus. Add a note on its prophylaxis.
- 50. Name the Malarial parasites. Describe in detail life cycle and laboratory diagnosis of Plasmodium Falciparum.
- 51. Name the opportunistic parasitic infections. Describe in detail Cryptosporidiosis.
- 52. Name the Cestodes. Describe morphology, life cycle, laboratory diagnosis of Echinococcus Granulosis.
- 53. Classify Nematodes. Describe morphology, life style and laboratory diagnosis of Ascaris Lumbricoides.
- 54. Mycetoma
- 10. Write in detail Mycotic poisoning.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the role of NGOs in Reproductive & Child Health Programme in India.
- 47. Describe the bacteriological Quality of Drinking Water for Rural Community
- 48. Discuss the concept of Public Private Partnership in Health Care Delivery.
- 49. Causes & Preventive Measures for Maternal Mortality in India.
- 50. Give a plan to Promote Quality Assurance in Primary Health Care Delivery.
- 51. Noise Induced Hearing Loss and its Prevention.
- 52. Infection Control in the Hospital of your Medical College.
- 53. Describe in brief the concept of social security in Occupational Health.
- 54. Community Health Need Assessment
- 10. Juvenile Delinquency

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Depot antipsychotics
- 47. District Mental Health Program (DMHP).
- 48. Maintaining abstinence in alcoholics.
- 49. Course and outcome in BPAD
- 50. Dissociative Motor Disorder
- 51. Biology of anxiety disorders
- 52. Assessment of suicide risk
- 53. Non-drug treatment of Anxiety disorder.
- 54. Adult ADHD, diagnosis and management.
- 10. Presenile dementias.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 BIOCHEMISTRY

# Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the mechanism of action of steroid hormones.
- 47. Describe the biochemical approach to investigate subfertility in the woman.
- 48. Insulin stress test
- 49. Biochemical diagnosis of Neuroblastoma
- 50. Describe the consequences of deficient intake of trace elements.
- 51. Hypervitaminosis
- 52. Deficiency manifestations of Selenium.
- 53. Role of vitamins as co-enzymes.
- 54. Carcinoid syndrome
- 10. Metabolic changes in obesity.

# 154-NR M.S. DEGREE EXAMINATION – OCTOBER, 2012 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Ivermectin
- 56. Drugs for pharmacotherapy of systemic fungal infection
- 57. Drugs for management of osteoporosis
- 58. Direct thrombin inhibitors
- 59. Dipeptidyl peptidase inhibitors
- 60. Recent developments in drug treatment of malaria
- 61. Preparation and therapeutic uses of Vitamin D
- 62. Drugs obtained from recombinant DNA technology
- 63.L asparaginase
- 10. Management of thyrotoxic crisis

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 FORENSIC MEDICINE

## Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Clinical features of Battered baby syndrome
- 47. Describe types of witness
- 48. What are types of autopsies and their indications?
- 49. Discuss the differences between entry and exit of fire arm injury.
- 50. Indications of magistrate inquest.
- 51. Postmortem findings in a case of typical hanging
- 52. Medico legal importance of different stains
- 53. Differences between fresh water and sea water drowning
- 54. Medical legal importance of surrogate mother.
- 10. Postmortem findings of ligature strangulation and smothering

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Pace maker potential and effect of sympathetic and parasympathetic stimulation on it.
- 56. Regulation of cardiac output.
- 57. Application of Poiseuille's Hagen formula and Reynold's number in hemodynamics of our body.
- 58. Non chemical control of respiration.
- 59. Mechanism of Phototransduction in visual receptors
- 60. Properties of synapse
- 61. Dorsal column pathways.
- 62. Theories of referred pain
- 63. Innervation and functions of muscle spindle
- 10. Role of mid brain in maintenance of posture.

# M.S. DEGREE EXAMINATION – OCTOBER, 2012 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. A 25 year old lady weighing 60 Kg comes to casualty with 45% burns. Outline the management of this patient.
- 47. Classifications, investigations and management of Carotid body tumour.
- 48. Discuss flaps in reconstructive plastic surgery.
- 49. Define hamartoma. Classify hemangiomas and discuss their management.
- 50. Discuss the clinical features and management of Empyema thoracis.
- 51. Classify parotid tumours. Discuss the management of complications of parotid surgery.
- 52. Classify soft tissue sarcomas. Discuss the staging investigations and management of rhabdomyosarcoma.
- 53. Describe the pathology, investigations and management of MALTOMA of stomach.
- 54. Discuss the signs, symptoms and the management of Chronic Subdural hematoma.
- 10. Describe the clinical features and management of Gastric volvulus.

# M.S. DEGREE EXAMINATION – OCTOBER, 2012 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Gout.
- 47. Ankylosing spondylitis
- 48. Loose bodies in knee
- 49. Multiple myeloma
- 50.AVN
- 51. Median nerve compression
- 52. Short wave therapy
- 53. Low backache evaluation
- 54. TB arthritis knee
- 10. Bone grafting

# M.S. DEGREE EXAMINATION – OCTOBER, 2012 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Kerato conjunctivitis sicca
- 48. Proliferative vitreo Retinopathy
- 49. D/D of Papilloedema
- 50. Causes and management of sub retinal neovascular membrane
- 51. Clinical features and management of pars planitis.
- 52. Optical coherence tomography
- 53. Complications of Kerato Refractive surgery
- 54. Aetiology, Clinical features and management of axial proptosis
- 55. Marginal corneal ulcers
- 56. Retained Intra ocular Foreign Body.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Otoacoustic Emissions
- 47. Ventilation Tubes
- 48. Rehabilitation of deaf child
- 49. Pharyngo cutaneous Fistula
- 50. Role of embolisation in ENT practice.
- 51. Laser in Otology
- 52. Orbital complications of sinusitis
- 53. Management of Stridor in Children
- 54. Spread of Nasopharyngeal carcinoma
- 10. Pharyngeal pouch.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Histology of skin
- 47. Special stains for elastic fibers.
- 48. Micrometer
- 49. Structural Chromosomal Aberrations.
- 50. Gene Therapy
- 51. Barr Body
- 52. Embalming Fluids
- 53. C.T. (Computerised tomograph) Scan
- 54. Procedures for colouring the dissected museum specimens.
- 10. Cadaver injectors.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Erythroplasia of Queyrat
- 56. Prostatitis
- 57. Dark ground illumination
- 58. Reiter's disease
- 59. Protease inhibitors
- 60. Newer anti leprosy drugs
- 61. Congenital syphilis
- 62. Osseous leprosy
- 63. Lagophthalmos
- 10. Viability of M. Leprae.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 GENERAL MEDICINE Paper IV Transcal Medicine

Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Antiamebic drugs.
- 29. Heat stroke
- **30.SIRS**
- 31. Malnutrition related Diabetes Mellitus
- 32. Tropical Splenomegaly
- 33. Fever with rash
- 34. Botulism
- 35. Endomyocardial Fibrosis
- 36. Adult Vaccines
- 10. Beri Beri

# M.S. DEGREE EXAMINATION – OCTOBER, 2012

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the problems and management of pregnancy with congenital heart disease.
- 29. Discuss the causes, diagnosis and treatment of venous thrombosis.
- 30. What are micronutrients? What is their role in pregnancy?
- 31. Discuss the management of Bronchial asthma with pregnancy.
- 32. Write short notes on:
  - a) Hyperemesis gravidarum
  - b) Partial exchange transfusion
- 33. Describe the management of jaundice in pregnancy.
- 34. Discuss the management of chronic pelvic pain
- 35. Discuss the usage of steroids during pregnancy.
- 36. Discuss the role of neoadjuvant chemotherapy in gynecological malignancies.
- 10. Discuss the importance of blood groups in obstetrics and gynaecology.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 PAEDIATRICS

# Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Management of Hospital Acquired Pneumonia.
- 29. Management of Urinary Tract Infection.
- 30. A) Describe briefly Arrhythmia.
  - B) Management of Supra Ventricular Tachycardia.
- 31. Management of Hemolytic Anemia.
- 32. Management of Idiopathic Juvenile Arthritis.
- 33. Investigation for a case of Mass per Abdomen.
- 34. Myoclonic Seizures.
- 35. Management of Status Asthmaticus.
- 36. Emerging Newer Disease.
- 10. Management of HIV infection in children.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the anaesthetic management and problems of congenital Diaphragmatic hernia repair in a neonate.
- 29. Discuss the merits and demerits of general VS regional anaesthesia for lower limb vascular surgery.
- 30. Define pre-eclampsia and eclampsia. Discuss the pathophysiology and anaesthetic management of the patient for cesarean section.
- 31. How will you diagnose and manage intra operative air embolism?
- 32. What are the causes for bradycardia under anaesthesia? Discuss the management.
- 33. Explain neuromuscular monitors in use. What are the clinical uses of theses monitors?
- 34. What are the difficulties experienced by the anesthetists in the magnetic resonance imaging unit when administering anaesthesia.
- 35. List several indications for endotracheal intubation.
- 36. Explain Cerebral Protection, Renal Protection and Myocardial Preservation during anaesthesia.
- 37.A 25 year old patient with poly trauma has come to the casualty department. Discuss the management.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Write about the recent advances in classification of acute leukemias
- 29. Describe instrumental flagging in blood cell counters
- 30. Write about blood substitutes
- 31. What are the current concepts in classification of thymic neoplasms.
- 32. Write about the recent advances in Renal cell carcinomas.
- 33. Describe the role of microwave in Histopathology
- 34. Describe the revised criteria for classification of systemic lupus erythematosis
- 35. Describe the advances in bone marrow pathology
- 36. What are the recent advances on pathogenesis of diabetes mellitus
- 10. Write about RNA in situ hybridisation

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# M.D. DEGREE EXAMINATION – OCTOBER, 2012 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Partial liquid ventilation
- 29. Auto CPAP
- 30. Auto fluorescence bronchoscopy
- 31. Pharmacotherapy for smoking cessation
- 32. Phosphodiesterase inhibitors
- 33. Newer diagnostic modalities in tuberculosis
- 34. Classification of diffuse parenchymal lung diseases.
- 35. Pharmacological treatment of stable COPD as per recent (2011) Gold guidelines.
- 36. Sick building syndrome
- 10. Indications and contraindications for lung transplant.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Enumerate microorganisms causing food poisoning. Add a note on its laboratory diagnosis.
- 29. Write an essay on immunological surveillance
- 30. Write in detail about Infection Control Committee.
- 31. Recent trends in Leprosy vaccines.
- 32. SARS (Severe Acute Respiratory Syndrome)
- 33. Write an essay on Transfusion transmitted viral diseases.
- 34. Write an essay on rapid diagnosis of viral diseases.
- 35. Write in detail Bacteriological examination of water.
- 36. Nucleic acid techniques in Diagnostic Microbiology
- 10. Hospital acquired infections

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Discuss the concept of Health for all. How relevant is it now?
- 30. Discuss the Health Planning in India.
- 31. Cost effectiveness study
- 32. Discuss the Qualitative Methods for Health Need Assessment
- 33. Role of Panchayats in decentralized health care delivery.
- 34. Describe in brief the Health Services in United States of America
- 35. National Rural Health Mission in India
- 36. Reasons of declining sex ratio in our country.
- 37. Describe the issues related to alternative health financing
- 38. Discuss briefly the Integrated Management of Childhood Illness. (IMCI)

# M.D. DEGREE EXAMINATION - OCTOBER, 2012

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Psychotropic medications during pregnancy and lactation
- 29. ADHD in adults; clinical manifestation and treatment
- 30. Repetitive Transcranial magnetic stimulation
- 31. Nicotine dependence and treatment
- 32. Cognitive behaviour therapy for OCD.
- 33. Mild Cognitive impairment
- 34. Yoga in Psychiatric practice
- 35. Functional Neuroimaging using MRI
- 36. Course and complications in subjects with Down's Syndrome
- 10. Procedures for involuntary admission

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Define hyponatremia, pseudohyponatremia and hypernatremia. Discuss the assessment of hyponatremia.
- 29. Describe the biochemical investigations utilized to assess the renal function.
- 30. Discuss the significance of isoenzyme determination with suitable examples.
- 31. Name the biochemical tests used in initial diagnosis of diabetes mellitus and in self monitoring of diabetes mellitus.
- 32. Biochemical analysis of (a) ascitic fluid and (b) CSF
- 33. Classify the lipoprotein disorders and discuss their implications in health and disease.
- 34. Tumor markers
- 35. Variable number tandem repeat polymorphism.
- 36. Biochemical investigations in the assessment and monitoring of PET.
- 10. Tests of hepatic function.

# M.D. DEGREE EXAMINATION - OCTOBER, 2012

#### PHARMACOLOGY

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Steady state plasma concentration
- 29. Treatment of hospital acquired pneumonia
- 30. Therapeutic uses of prostaglandin analogues
- 31. Steroid sparing agents in rheumatoid arthritis
- 32. Guidelines to treat HIV patients
- 33.GCP guidelines
- 34. Potential therapeutic uses of 5 HT antagonists
- 35. Current therapeutic status of thalidomide
- 36. Effect of change in kinetics on drug dose and dosing schedule
- 10. Composition and responsibilities of institutional human ethics committee.

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the duties of a medical practitioner in a case of poisoning
- 29. What is professional misconduct? Discuss how the disciplinary control over medical profession is exercised.
- 30. Explain types of consent
- 31. Stages of acute alcohol intoxication
- 32. Cocaine and its medico legal importance
- 33. First Aid and treatment of Snake Bite
- 34. Treatment of cyanide poisoning
- 35. Section 320 of IPC
- 36. Types of impulses
- 10. Describe indications and uses of foetal autopsy

# M.D. DEGREE EXAMINATION – OCTOBER, 2012

# SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks (Draw Diagrams wherever necessary)

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Vascular endothelium
- 29. Non invasive techniques to evaluate cardiac function.
- 30. Circulatory shock
- 31. Bladder dysfunction
- 32. Hazards of deep sea diving
- 33. Sleep disorders
- 34. Inverse stretch reflex
- 35. Multiple system atrophy
- 36. Brown Sequard syndrome
- 10. Evoked potentials

# M.S. DEGREE EXAMINATION – OCTOBER, 2012 GENERAL SURGERY

Paper-IV: General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss the role of surgical robots.
- 29. Classify Ano-Rectal anomalies. Describe briefly their management.
- 30. Discuss the management options of Carcinoma oesophagus
- 31. Discuss clinical features and management of carcinoid tumour of the gut.
- 32. Classify the causes, investigations and management of surgical jaundice.
- 33. Clinical features, scoring systems and management of acute pancreatitis.
- 34. Recent advances in bariatric surgery.
- 35. Wake up investigations and management for painless haematuria.
- 36. Discuss various surgeries in the management of femoral hernia
- 37. Role of Endoluminal vascular surgery in management of vascular disorders.

# M.S. DEGREE EXAMINATION OCTOBER, 2012 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Club foot
- 29. Minimal internal fixation
- 30. IPOF (Immediate Post Operative Fittings)
- 31. Rocker bottom foot
- 32. Bone tendon bone grafting
- 33. Hebert screws
- 34. Osteoporosis
- 35. Side swipe injuries
- 36. Reactive arthropathy
- 10. Congenital tibial kyphosis

# M.S. DEGREE EXAMINATION – OCTOBER, 2012 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Pharmacological modulation of Glaucoma Filtration Surgery.
- 30. Confocal microscopy
- 31. Merits and demerits of multifocal intra ocular lens
- 32. Interpretation of static perimetry
- 33. Autologous cultivated limbal epithelium transplantation.
- 34. Sutureless vitrectomy
- 35. Merits and demerits of fundus fluorescein angiography and indocyanine angiography.
- 36. Clinical application of ERG
- 37. Adjustable sutures in squint surgery
- 38. Part time occlusion therapy for amblyopia Recent advances

# 183-NR M.S. DEGREE EXAMINATION – OCTOBER, 2012 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Discuss about the indications and various techniques of medialization thyroplasty.
- 29. Discuss and compare stapedotomy and stapedectomy.
- 30. Bone anchored hearing AID
- 31. Discuss about lateral sinus thrombosis
- 32. Endoscopic DCR (Dacryocystorhinostomy)
- 33. Chemoprevention in Head and Neck cancer
- 34. Ludwig's angina
- 35. Laryngocele
- 36. Principles of Tympanoplasty
- 10. Tracheo Esophageal Fistula

# M.D. DEGREE EXAMINATION – OCTOBER, 2012 ANATOMY

# Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks (Draw diagrams wherever necessary)

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- **31.** Closed part of Medulla oblongata.
- **32.** Third ventricle of brain.
- **33.** Pterygopalatine Ganglion
- **34.** Hippocampal formation
- **35.** Medial Longitudinal Bundle (M.L.B)
- **36.** Implantation
- **37.** Inductors
- **38.** Fallot's Tetralogy
- **39.** Development of vagina and its anomalies.
- **40.** Derivatives of cloacae

# M.D. DEGREE EXAMINATION – OCTOBER, 2012

# D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28.ANCA
- 29. Dermatitis artefacta.
- 30. Uremic pruritus
- 31. Terry's nails
- 32. Addisonian pigmentation
- 33. Drug induced lupus erythematosus
- 34. Scleredema adultorum of Buschke
- 35. Smoking and Skin
- 36. IVIG in Dermatology
- 10. Pseudoporphyria.

# M.D. DEGREE EXAMINATION – APRIL, 2013

# GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

# All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Portal circulation
- 2. Neurotrophic factors.
- 3. Pathogenesis of obesity
- 4. IHD & Cardiomyocyte Regeneration
- 5. Investigations in SLE
- 6. Hypophosphatemia
- 7. Viral markers in Hepatitis B.
- 8. Pulmonary Function Tests.
- 9. Immunotherapy in multiple myeloma
- 10. Approach to Chorea pathogenesis

# M.S. DEGREE EXAMINATION – APRIL, 2013

# OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 65. Describe the Anatomy and development of vagina.
- 66. Course of ureter and its relations
- 67. Hematological changes during pregnancy.
- 68. Physiology of lactation
- 69. Biochemical changes in PIH.
- 70. Anti coagulants in pregnancy
- 71. GnRH Agonists.
- 72. HPV infection and its significance.
- 73. Endometrial hyperplasia
- 10. Natural defence mechanisms of female genital tract.

# M.D. DEGREE EXAMINATION – APRIL, 2013

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Describe briefly blood brain barrier
- 65. Pathophysiology of acute renal failure.
- 66. Anti viral drugs
- 67. Liver function tests
- 68. Lab diagnosis of Hemolytic anemia.
- 69. Pathophysiology of cyanotic spell
- 70. Iron metabolism
- 71.A) Pathogenesis of portal hypertension.
  - B) What are its complications?
- 72. Principles of immunodeficiency disorders
- 10. Primary complex.

# M.D. DEGREE EXAMINATION – APRIL, 2013 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 65. Write a note on Sir Robert McIntosh
- 66. Describe the formation and circulation of cerebro spinal fluid.
- 67. Write note on second gas effect
- 68. Discuss the applications of gas laws in Anaesthesia.
- 69. What are the physiological changes that occur during artificial ventilation?
- 70. Describe the anatomy of coronary circulation. What are the physiological factors that alter the blood flow in the circulation.
- 71. Describe the applied Anatomy of an intercostal nerve and the sites at which it can be blocked and complications of such block.
- 72. Describe newer muscle relaxants and their use.
- 73. Compare the Pharmacological effects of Halothane and Isoflurane.
- 74. Describe the various methods of Humidification of the inspired gases, mentioning the merits and demerits of each.

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 66. Describe the role of free radicals in cell injury.
- 67. What are chemokines? What is their role in inflammation?
- 68. Discuss Tay-Sachs disease
- 69. Enumerate the opportunistic infections and neoplasms found in patients with HIV infection.
- 70. What is the role of WNT signaling pathway in carcinogenesis?
- 71. Write the pathophysiology and complications of thromboembolism.
- 72. Write about the pathogenesis of immune complex mediated tissue injury.
- 73. Discuss the pathogenesis of septic shock
- 74. Describe the mitochondrial pathway of apoptosis
- 75. Write about the role of cyclins in cell cycle transition

# M.D. DEGREE EXAMINATION – APRIL, 2013 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 56. Discuss the principles, construction and functionalities of individual components of an image intensifier. Briefly describe the fluoroscopic imaging unit assembly.
- 57. Discuss the principles and applications of Multislice volumetric spiral CT.
- 58. Discuss the imaging anatomy of the shoulder joint
- 59. Write short note on:
  - a) High KV techniques in chest X-ray
  - b) Fetal circulation
  - c) Peizo electric effect
  - d) Iohexol
  - e) Thermionic emission
- 60. Describe in detail the structure and principle of intensifying screen. Discuss the newer phosphor technology.
- 61. Discuss in detail digital subtraction angiography.
- 62. Write short note on:
  - a) Craniovertebral junction
  - b) Carpal tunnel view
  - c) Rectification
  - d) Air gap technique
  - e) Sialography
- 63. Discuss in detail the construction of a grid and explain how it helps in improving the radiographic quality.
- 64. Discuss the imaging anatomy of the orbit.
- 65. Discuss the basic principles of MRI

# M.D. DEGREE EXAMINATION – APRIL, 2013 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Lungs in pregnancy.
- 65. Macrophage in lung
- 66. Evaluation of small air way function
- 67. Congenital agenesis of lung
- 68. Pulmonary circulation.
- 69. Newer diagnostic tests in tuberculosis
- 70. High altitude pulmonary edema.
- 71. Non respiratory functions of lung.
- 72. Primary ciliary dyskinesia
- 10.Aerosol therapy in lung diseases

# M.D. DEGREE EXAMINATION – APRIL, 2013 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Recent developments in electron microscope
- 65. Describe newer methods of sterilization and disinfection in diagnostic microbiology.
- 66. Give an account of disposal of biomedical wastes.
- 67. Write an essay on type-I immediate hypersensitivity
- 68. Describe newer developments in ELISA for use in diagnostic microbiology.
- 69. Transposable genetic elements
- 70. Noble laureates in Microbiology
- 71. Immunology of malignancy
- 72. Describe the recent approach for maintaining anaerobiosis for isolation of anaerobic bacteria.
- 10. Mechanism of autoimmune diseases.

# M.D. DEGREE EXAMINATION – APRIL, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

64. Role of Social Sciences in disease control.

- 65. Scope and prospects of Public Health.
- 66. Disability and Community Based Rehabilitation
- 67. Human Genome Project
- 68. New WHO growth chart
- 69. Behavioral disorders in children
- 70. Social Pathology and its importance in disease causation
- 71. Gender equity
- 72. Civil Society Role in Health Care
- 10. Population education.

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# M.D. DEGREE EXAMINATION – APRIL, 2013 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Description, procedure and uses of Tower of London test
- 65. Contributions of Margaret Mead.
- 66. Existential Psychology.
- 67. Guru-Chela relationship as a backdrop of psychotherapy.
- 68. Prejudice, formation of prejudice and its role in human interactions.
- 69. Social factors in the causation and maintenance of mental illnesses.
- 70. Polymerase chain reaction and psychiatry.
- 71. Synthesis, metabolism and pathways of Dopamine in the brain.
- 72. Structure and connections of the caudate nucleus.
- 10. Receptor structure and the regulation of its functions.

# M.D. DEGREE EXAMINATION – APRIL, 2013 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Principles and applications of electrophoresis and Immunofixation electrophoresis.
- 65. Explain various protein conformations and methods to elucidate the same.
- 66. Structures and functions of heteropolysaccharides.
- 67. Principles and application of PCR and RT-PCR
- 68. Principle and application of Nanotechnology in medicine and diagnostics.
- 69. ELISA
- 70. Methods of detection of organic and amino acids in urine.
- 71. Chemiluminescence
- 72. Body buffer systems in health and disease
- 10. Blotting techniques.

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Control release preparations: Advantages and disadvantages
- 65. Inhalation route in drug delivery
- 66. Animal screening of a drug molecule for is antifertility effects
- 67. Kinetics of drug metabolism and its clinical significance
- 68. Rational drug therapy
- 69. High pressure liquid Chromatography.
- 70. Second messengers.
- 71. Animal toxicity studies
- 72. Drug antagonism
- 10. Null hypothesis

#### FORENSIC MEDICINE

Paper-I : Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Dental repairs and restorations
- 65. Physiology of foetal blood circulation
- 66. Anthropometry.
- 67. FDI formula
- 68. Radiology in forensic practice
- 69. HLA system
- 70. Teeth bite marks
- 71. Secretors
- 72. Choline esterase
- 10. Pregnancy tests and their validity

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. What is genetic code? Explain its significance.
- 65. Name the various ion channels. Explain the principles of patch clamp technique.
- 66. Explain the principles of Cathode Ray oscilloscope
- 67. Describe bio feed back mechanisms with examples.
- 68. Pathophysiology of Ageing
- 69. Describe the contributions of Starling in understanding physiological principles.
- 70. Claude Bernard.
- 71. Explain Biphasic Action Potential and its clinical importance
- 72. Intercellular connections
- 10. Molecular basis of skeletal muscle contraction.

#### **RADIOTHERAPY**

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the steps involved in IMRT treatment of a nasopharyngeal carcinoma.
- 11. Define wedges. Discuss the use of wedges in the treatment of head and neck malignancies with radiotherapy.
- 12. What is percentage depth dose and what are the factors influencing it?
- 13. Define linear energy transfer. Discuss the variation of this entity in the different modalities of particulate radiation.
- 14. Describe briefly the various beam modifying devices.
- 15. Define hyperfractionation and discuss the radiobiological rationale.
- 16. Enumerate the deterministic effects of radiation. Add a note on radiation cataractogenesis.
- 17. Discuss the effects of radiation on the embryo at various developmental ages.
- 18. Enumerate the dose limits as per the NCRP guidelines. Add a note on the concept of ALARA.
- 19. Discuss the late effects of radiation on the lung. Add a note on its management.

# M.S. DEGREE EXAMINATION – APRIL, 2013 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Embryology of thyroid and anomalies of development
- 65. Anatomy of spaces of hand
- 66. Liver function tests
- 67. Renin Angiotensin axis.
- 68. Phases of gastric secretion
- 69. Disseminated Intravascular Coagulation
- 70. Post operative Analgesia
- 71. Pathology of gallstones.
- 72. Chemotherapeutic options for lymphomas
- 10. Echinococcus granulosus.

# **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 72. Bone cement
- 73. Pes Cavus
- 74. Arthrolysis
- 75. Brown Sequard syndrome
- 76. Myositis Ossificans
- 77. Carpal Tunnel syndrome
- 78. Madelung's deformity
- 79. Renal Osteodystrophy
- 80. Spina Ventosa
- 10.Klippel-Feil syndrome

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 66. Describe the surgical Anatomy of extra ocular muscles.
- 67. Abnormal Pupillary reactions.
- 68. Patho Physiology of Senile Cataract.
- 69. Pathology of Papilledema
- 70. Cysticercosis
- 71. Antibiotics used in Ophthalmology.
- 72. Immunological basis of Ocular Surface Inflammation.
- 73. Discuss the optical condition of an aphakic eye and related visual problems.
- 74. Uses of Prisms in Ophthalmology.
- 75. Write short notes on:
  - c) Linen, Sharp Instruments, Blunt Instruments, Diamond Knife
  - d) Disinfection of operation theatre 10'x10'x10'

#### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Applied Anatomy of pterygo palatine fossa
- 65. Physiology of speech
- 66. Membranous labyrinth
- 67. Surgical Anatomy of the vocal cord
- 5. Anti-histamines
- 6. Pre-operative preparations before major Head & Neck surgery
- 7. Development of parathyroid glands
- 8. Human immunodeficiency virus
- 9. Ostiomeatal complex
- 10. Role of smoking and alcohol in the genesis of head and neck cancer

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Surgical incisions of the anterior abdominal wall and its advantages and disadvantages.
- 65. Nasal septum and its surgical importance.
- 66. Umbilicus and its surgical importance (Its clinical significance)
- 67. Ankle Sprains and its surgical importance.
- 68. Femoral triangle and its clinical significance.
- 69. Bell's Palsy and its characteristic features.
- 70. Ductus Arteriosus and its surgical importance.
- 71. Ischiorectal Fossa and its surgical Anatomy.
- 72. Anatomy of Thyroid Gland and its surgical importance
- 10. Anatomy of hip joint and its applied aspect.

#### D.V.L.

# Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Epidemiology of Hansen's disease
- 65. Anatomy of male urethra
- 66. Cellular characteristics of Dermal inflammatory cells
- 67. Ultra structure of dermoepidermal junction.
- 68. Anatomy of the nail unit
- 69. Epidermal and dermal changes in skin ageing
- 70. Metabolic pathway of melanin synthesis
- 71. Immunological functions of skin
- 72. Principle and methodology of grams stain and Ziehl Neelsen stain.
- 10. Percutaneous absorption.

#### HOSPITAL ADMINISTRATION

Paper-I – General Administration and Management in Hospital field

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Managerial skills
- 38. Management by Objective (MBO)
- 39. Business Portfolio Matrix
- 40. Job design
- 41. Porter and Lawler model for motivation
- 42. Feed Forward Control
- 43. Replenishment systems for Inventory Control
- 44. Conflict management
- 45. Cost Benefit analysis
- 10. Human Resource Development in Hospitals.

#### **GENERAL MEDICINE**

Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Alcoholic liver disease
- 48. Auto immune Hypothyroidism
- 49. Anterior Circulation Infarct
- 50. Endothelin receptor antagonist
- 51. Aplastic anemia
- 52. Management of Rheumatoid arthritis
- 53. Hemolytic Uremic syndrome.
- 54. Hypertrophic Cardiomyopathy
- 55. Solitary Pulmonary Nodule
- 10. Chemical Bioterrorism

# M.S. DEGREE EXAMINATION – APRIL, 2013 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Shoulder Dystocia and its management in labour
- 48. What are the effects of hyperglycemia on pregnancy?
- 49. Active management of Third Stage of Labour.
- 50. Puerperal fever Discuss the causes and appropriate treatment
- 51. Medical management of ectopic pregnancy
- 52. Discuss the place of instrumental delivery in modern Obstetrics
- 53. D.I.C in pregnancy
- 54. Respiratory distress syndrome in new born.
- 55. Neonatal jaundice
- 10. Antepartum foetal surveillance.

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Management of High Risk Infant.
- 58. Hypoxic Ischemic Encephalopathy
- 59. A) Phototherapy
  - B) What are its complications?
- 60. Investigation of Short Stature
- 61. Importance of Anthropometry in clinical examination
- 62. Vaccine preventable diseases
- 63. Revised National Tuberculosis Control Program
- 64. Habit disorders
- 65. Phobias in Childhood
- 66. Temper tantrum

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 49. Discuss the pathophysiology and early goal directed therapy in management of septic shock.
- 50. Write in brief about the role of Anesthesiologist outside the operation theatre.
- 51. Briefly outline the methods used to monitor the depth of anaesthesia.
- 52. Describe the recent ventilatory strategies in the management of ARDS
- 53. Give a brief note on various methods of treatment of acute pain.
- 54. Discuss the aetiology, diagnosis and management of fat embolism
- 55. Describe the complications of hyperbaric oxygen
- 56. Write a note on capnography and its uses.
- 57. Describe the recent advances in the management of acute lung injury.
- 58. What is total parenteral nutrition and add a note on the complications with it.

# M.D. DEGREE EXAMINATION – APRIL, 2013 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Discuss the differential diagnosis of cystic diseases of kidney
- 47. What are the reperfusion associated changes in heart
- 48. Discuss laboratory diagnosis of Hepatitis B viral infection
- 49. Describe the pathogenesis of renal lesions in diabetes mellitus
- 50. Describe the pathology of Hirschsprung disease
- 51. Write about the complex sclerosing lesions of breast
- 52. Describe the pathogenesis of Cervical intraepithelial Neoplasia.
- 53. What are the Premalignant lesions of prostate?
- 54. What is minimal deviation melanoma?
- 10. Describe pulmonary alveolar proteinosis.

# M.D. DEGREE EXAMINATION – APRIL, 2013 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLWING:

- 37. Enumerate pre-malignant conditions of GIT. Describe imaging features of small and large bowel malignancies
- 38. Briefly describe the pulmonary arterial anatomy. Discuss in detail the role of a Radiologist in management of a suspected case of pulmonary thromboembolism.
- 39. Discuss the role of a Radiologist in management of palpable and non palpable breast lesions utilizing X-ray mammography and sonomammography.
- 40. Describe embryology of gut rotation and fixation. Discuss the differential diagnosis of a neonate with bilious vomiting.
- 41. Discuss the role of imaging in pituitary tumours.
- 42. Discuss the principles, techniques, advantages, limitations of CTA and MRA.
- 43. Write short one on:
  - a. Gastric volvulus
  - b. Calcifications in malignant breast disease
  - c. Meckel's diverticulum
  - d. Truncus arteriosus
  - e. Functioning tumours of pancreas
- 44. Discuss the anatomy of secondary pulmonary lobule. Discuss the pattern of interstitial lung diseases on HRCT and briefly discuss their differential diagnosis.
- 45. Write short notes on:
  - a. Choledochal cyst
  - b. Double outlet right ventricle
  - c. Adrenal adenoma
  - d. Pulmonary venous hypertension
  - e. Meconium ileus
- 10. Discuss the role of ultrasound and CT in diffuse liver disease.

#### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Manifestations of pulmonary tuberculosis in immuno compromised host.
- 47. Mantoux Test
- 48. Silicosis and TB.
- 49. INH prophylaxis
- 50. Non tuberculous myco bacteria
- 51. SIRS (Systemic immune Reconstitution Syndrome)
- 52. Diagnosis and management of pulmonary tuberculosis in Diabetes mellitus
- 53. Encysted pleural effusions.
- 54. Drug resistance in tuberculosis
- 10. Congenital tuberculosis

# M.D. DEGREE EXAMINATION – APRIL, 2013 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Escherichia coli causing diarrheal disease
- 48. Pathogenesis and diagnosis of cholera. Add a note on vaccine trial against cholera.
- 49. Epidemiology of Borrelia infections in India. Add a note on recent methods of laboratory diagnosis for the condition.
- 50. Morphology, cultural and epidemiological features of Pseudomonas aeruginosa. Add a note on the role of bacteria in hospital infection.
- 51. Pathogenesis and diagnosis of infections caused by Haemophilus influenzae. Add a note on vaccines against the condition.
- 52. Epidemiology and microbiology of oxygenic Corynebacterium diphtheriae. Discuss the reasons for detection of cases of diphtheria now in the community.
- 53. Pathogenesis of plague. Add a note on resurgence of plague in India.
- 54. Laboratory diagnosis of typhoid fever.
- 55. Pathogenesis and clinical manifestations of Streptococcus pyogenes infection. Add a note on laboratory diagnosis.
- 56. Pathogenesis and laboratory diagnosis of gonorrhoea. Add a note on recent methods.

# M.D. DEGREE EXAMINATION – APRIL, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 49. Discuss in brief the design of Cohort Study
- 50. Discuss the concept of Clinical Epidemiology
- 51. Lot quality sampling technique.
- 52. Discuss the Concept of Control, Elimination & Eradication
- 53. Newer communicable diseases during last thirty years.
- 54. Prospects of eradication of Poliomyelitis in Andhra Pradesh.
- 55. Accident Prevention
- 56. Strategy under Integrated Disease Surveillance Project in your State.
- 57. Elimination of Filariasis in India.
- 58. Surveillance in Malaria.

# M.D. DEGREE EXAMINATION – APRIL, 2013 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Clinical features, etiopathology and management of Lewy body dementia.
- 47. Post head injury psychiatric sequelae and their management.
- 48. Clinical features, etiopathology and management of Huntington's disease
- 49. Psychological and psychiatric correlates of Coronary artery disease
- 50. Psychological factors involved in Hysterectomy and their management.
- 51. Phantom limb phenomenon and its management
- 52. Psychological factors and psychiatric assessment in the context of Organ transplant.
- 53. Difficulties and approaches to the diagnosis of depression in the medically ill.
- 54. Pharmacology, adverse effects and uses of Galantamine.
- 10. Management of Tubercular meningitis.

# M.D. DEGREE EXAMINATION – APRIL, 2013 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Describe the formation and breakdown of Glycogen. Discuss glycogen storage disorders.
- 48. Discuss the pathway of heme biosynthesis and its regulation.
- 49. Write briefly on:
  - a. Sickle cell hemoglobin
  - b. Cellular RNAs
- 50. Discuss the following:
  - a. Inhibitors and uncouplers of oxidative Phosphorylation.
  - b. High energy compounds.
- 51. A 40 year old male was admitted to the hospital with acute chest pain. Clinical evaluation showed it to be myocardial infarction. His fasting lipid profile levels were:

Total cholesterol 300 mg/dl, HDL – 25mg/dl, triglycerides – 150 mg/dl

- a. Calculate his LDL and VLDL levels and mention the normal levels of lipid profile
- b. Discuss the biochemical basis of the various cholesterol lowering treatments that can be offered to the patient.
- 52. A new born infant developed hyperammonemia 32 hours after birth. The infant was treated with dietary supplement of benzoate and arginine. Following is the blood report of the infant:

Citrulline – Low; Arginine-Low; Ammonia-High, Glutamine-High

- a. What is the provisional diagnosis and possible enzyme defect in this patient?
- b. Explain the biochemical basis for altered levels of glutamine and ammonia
- c. What is the basis of treatment with benzoate and why does the defect become apparent only about 3 days after birth?
- 53. Describe the synthesis of biologically important products from tyrosine. Add a note on associated disorders and discuss the biochemical investigations for the detection of these disorders.
- 54. Briefly describe:
  - a) Thromboxanes
  - b) Importance of PRPP
- 55. Describe the process of eukaryotic transcription. Write the details of post transcriptional modifications.
- 10. Discuss the formation and fate of acetyl CoA in the body.

#### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. NMDA receptor antagonists and their clinical applications.
- 56. Neuroleptanalgesia, its advantages and limitations.
- 57. Propranolol: its pharmacology and clinical applications
- 58. Non Benzodiazepine Hypnotics
- 59. Serotonin Nor epinephrine reuptake inhibitors
- 60.D2 (Dopamine) receptor antagonists and their Pharmacology
- 61. Anti epileptics acting through GABA enhancement.
- 62. Pharmacotherapy of Alcohol dependence
- 63. Potassium sparing Diuretics
- 10. Centrally acting Muscle relaxants.

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 58. Brain stem death and its importance
- 59. Acute renal failure
- 60. Death due esophageal varices
- 61. Splenomegaly
- 62. Enzyme Histo-chemistry in trauma
- 63. Lobar pneumonia
- 64. Super bug
- 65. Acid fast bacilli
- 66. Sexually transmitted diseases
- 67. Disposal of biological waste

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55.T Lymphocytes
- 56. Gastrin
- 57. Describe the hormone acting on pancreatic secretion and its regulation
- 58. Indicators of ovulation and hormonal influence.
- 59. Mechanisms for production of sperms by testis
- 60. Describe clotting mechanism
- 61. Describe the phases of gastric acid secretion with experimental evidences.
- 62. Describe physiological action of thyroid hormones.
- 63. Explain the processes that are involved in the development of breast and production of milk.
- 10. Describe the functions of pineal gland.

#### **RADIOTHERAPY**

Paper-II: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Discuss the role of concurrent chemo-RT in locally advanced head and neck squamous cell carcinoma.
- 20. Enumerate malignancies associated with AIDS. Briefly discuss the management of primary CNS lymphoma.
- 21. Discuss the management of carcinoma middle third of esophagus.
- 22. Describe the TNM staging of carcinoma stomach and the management of post operative adjuvant treatment
- 23. Discuss the management of carcinoma cervix stage IIB.
- 24. Describe the TNM staging of carcinoma nasopharynx and discuss the management of carcinoma nasopharynx T3N2M0
- 25. Discuss the role of hormonal agents in prevention of invasive breast carcinoma.
- 26. Define field cancerization. Add a note on second primary malignancies in patients who have previously had a primary head and neck malignancy.
- 27. Enumerate malignant lesions that affect the orbit. Add a note on orbital lymphoma.
- 28. Discuss the staging of Wilm's tumour as per the 5<sup>th</sup> national Wilm's tumour study group. Discuss the management of a post operative favourable histology stage III patient.

# M.S. DEGREE EXAMINATION – APRIL, 2013 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Discuss Blast injuries and their management
- 47. Describe the clinical features, investigations and management of Pelvic fractures.
- 48. Causes of upper GI bleed and discuss its management.
- 49. Discuss the pathology of regional ileitis, complications and its management
- 50. Classify choledochal cyst and discuss briefly its management
- 51. Discuss the clinical features investigations and management of Achalasia Cardia.
- 52. Describe the pathology and management of Medullary carcinoma of thyroid
- 53. Classify Hypospadias and discuss its management
- 54. Describe the clinical features and management of cystosarcoma phylloides
- 10. Discuss the management options in Rectal prolapse.

# M.S. DEGREE EXAMINATION – APRIL, 2013 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 56. Surgical management fractures of distal end of Radius
- 57. Bennett's fracture
- 58. Locking Compression plate
- 59. Infected Non-Union of tibial shaft fractures
- 60. Hangman's fracture
- 61. Injuries of Acromioclavicular joint
- 62. Fat Embolism
- 63. Tibial Pilon fractures
- 64. Surgical management of supracondylar fractures of femur.
- 10. Management of Polytrauma.

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# M.S. DEGREE EXAMINATION – APRIL, 2013 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 48. Management of convergent squint in a 3 years old child.
- 49. Pseudophakic Glaucoma
- 50. Medical management of diabetic retinopathy
- 51. Unilateral dilation of pupil
- 52. Diagnosis and localisation of retained intra ocular foreign body.
- 53. Bifocal and multifocal intra ocular lenses
- 54. How will you manage a case of Acanthamoeba Keratitis
- 55. How will you manage a case of cystoid macular oedema.
- 56. Eye bank
- 57. Write short notes:
  - c) Nasolacrimal Duct Probing
  - d) Paracentesis

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## M.S. DEGREE EXAMINATION – APRIL, 2013 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Discuss the clinical features and management of acoustic neuroma
- 48. Prevention of noise induced hearing loss
- 49. Management of papillary carcinoma of the thyroid
- 50. Theories of genesis of juvenile nasopharyngeal angiofibroma
- 51. Management of T3N1Mx glottic cancer
- 52. In-vitro tests for nasal allergy
- 53. Complications of acute coalescent mastoiditis
- 54. Clinical features of malignant otitis externa
- 55. Treacher-Collin's syndrome
- 56. Differential diagnosis for unilateral reddish fleshy nasal mass

## M.D. DEGREE EXAMINATION – APRIL, 2013 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Palatine Tonsil
- 56. Blood supply and venous drainage of heart
- 57. Anatomy of stomach
- 58. Axillary artery and its branches
- 59. Hamstring muscles
- 60. Nasal septum
- 61. Pleura of the lungs
- 62. Rectus Sheath
- 63. Urinary bladder
- 10. Dorsal venous arch of hand

## M.D. DEGREE EXAMINATION – APRIL, 2013

### D.V.L.

## Paper-II

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Pathogenesis of Allergic Contact Dermatitis
- 38. Hair Shaft disorders
- 39. Pregnancy dermatoses
- 40. Basal Cell Nevus Syndrome
- 41. Oro-Genital Aphthosis
- 42. D/D of Annular Skin Lesions
- 43. Steroid sparing drugs used in Dermatology
- 44. Hereditary Photosensitivity Diseases
- 45. Scleredema Adultorum of Buschke
- 10. Histopathological classification of Bullae

## M.D. DEGREE EXAMINATION – APRIL, 2013

## HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Kartar Singh Committee
- 47. National Aids Control Programme
- 48. Case Control Study
- 49. Epidemiology of road traffic accidents (RTA)
- 50. Quality adjusted life years (QALY)
- 51. CHI Square Test
- 52. Urban medical care
- 53. Quality circles
- 54. Programme patient care
- 10. Bias and its prevention in health research

## M.D. DEGREE EXAMINATION -APRIL, 2013

### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Approach to Acute Renal Failure.
- 56. Neutropenic Enterocolitis.
- 57. Osteoarthritis.
- 58. Drug induced musculoskeletal disorders
- 59. Depression in medical disorders
- 60. Refractory Asthma
- 61. Jet lag disorders
- 62. Vitamin B<sub>12</sub>.
- 63. Management of Parkinson's disease
- 10. Contraindications of Androgens

## M.D. DEGREE EXAMINATION – APRIL, 2013 **OBSTETRICS & GYNAECOLOGY**

Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. What is secondary infertility? Enumerate the causes. How will you investigate?
- 56. Chocolate cyst Clinical features and Management
- 57. Discuss complete perineal tear.
- 58. Various causes of Pyometra and its management
- 59. Colposcopy and its significance.
- 60. Acute pelvic inflammatory disease
- 61. Vulval moniliasis and management
- 62. Tumor markers in gynecology
- 63. Emergency contraception
- 10. Second Trimester MTP.

# M.D. DEGREE EXAMINATION – APRIL, 2013 PAEDIATRICS

# Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. A) Clinical features of Rickets
  - B) Complications of Hypervitaminosis D
- 56. Nutritional problems of Adolescents
- 57. Parenteral Nutrition
- 58. Problems of infant feeding in early childhood.
- 59. HLA system.
- 60. Hypergammaglobulinemia
- 61. WHO classification of HIV aids in children.
- 62. Immunocompromised child
- 63. Management of Japanese B encephalitis.
- 10. Diagnosis Thrombocytopenia.

## M.D. DEGREE EXAMINATION – APRIL, 2013 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Discuss Anaesthetic management of a vegetable foreign body in right Bronchus of a child of two years.
- 58. Discuss pathogenesis, clinical features and treatment of Mendelson's syndrome.
- 59. What is minimum monitoring standard in anaesthesia
- 60. Write the Anaesthetic management of a neonate posted for repair of congenital diaphragmatic hernia.
- 61. Discuss Anaesthetic management of a 10 year old child with post Tonsillectomy bleeding.
- 62. A Patient with head injury is posted for emergency Craniotomy. Discuss the Anaesthetic management.
- 63. Discuss precautions to be taken in Anaesthetizing a patient with Hepatitis B infections.
- 64. Enumerate the causes for perioperative Hypotension. Add a note on the management.
- 65. A post transplant patient is posted for Laparotomy. Discuss the Anaesthetic management
- 66. Discuss the Anaesthetic problems in smokers.

## M.D. DEGREE EXAMINATION – APRIL, 2013 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Discuss the methods of detection of minimal residual disease in acute leukemia
- 58. Describe the role of FNA in diagnosis of Thymic lesions
- 59. Role of serum lipids in Health and Disease
- 60. What are the biochemical markers of cardiac injury?
- 61. What are the uses of colony stimulating factors?
- 62. Discuss blood substitutes and its uses
- 63. Describe the principles of dipsticks in urine chemistry.
- 64. Discuss the molecular basis of thalassemia syndrome
- 65. Describe the methods of automation in cytology
- 66. Write about plateletpheresis

## M.D. DEGREE EXAMINATION – APRIL, 2013 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Discuss the role of Neurosonography in neonates.
- 48. Describe in detail individual conditions that can present with monoarthritis. What is the imaging approach to a case of monoarthritis?
- 49. Describe the radiological approach in male infertility
- 50. Write short note on:
  - a. Doppler of orbit
  - b. Multilocular cystic renal neoplasm
  - c. Atypical Osteosarcoma
  - d. ADEM
  - e. Carotid cavernous fistula
- 51. Describe the role of imaging in Acute Pelvic pain in females
- 52. Discuss the principles, techniques, advantages, limitations and complications of catheter angiography.
- 53. Describe in detail the imaging features of injuries to facial bones.
- 54. Write short note on:
  - a. Retinoblastoma
  - b. Septo-Optic dysplasia
  - c. Biophysical profile
  - d. Interrupted periosteal reaction
  - e. Thrombolytic therapy in stroke.
- 55. Describe the development of embryological development of spinal cord. Classify Congenital anomalies of spine and discuss in detail occult spinal dysraphism.
- 56. Describe the role of imaging in planning endoscopic sinus surgery. Write briefly on the imaging of fungal sinusitis.

## M.D. DEGREE EXAMINATION – APRIL, 2013 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Ventilatory associated pneumonia
- 58. Allergic bronchopulmonary aspergillosis
- 59. Coal workers Pneumonia
- 60. Pharmacological management of COPD
- 61. Types of respiratory failure and management
- 62. Cryptogenic fibrosing alveolitis (IPF)
- 63. Target therapy in Bronchogenic carcinoma
- 64. N-Acetyl cystine
- 65. Drug induced lung diseases
- 66. Home oxygen therapy

# M.D. DEGREE EXAMINATION – APRIL, 2013 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Pathogenesis and laboratory diagnosis of influenza. Add a note on vaccines against the disease.
- 56. Give an account of Ebola virus
- 57. Describe hepatitis C virus. Add a note on its laboratory diagnosis.
- 58. Prion mediated diseases in humans
- 59. Discuss the pathogenesis and newer diagnostic methods of cystic echinococcosis.
- 60. Discuss Entamoeba dispar and other morphologically similar Entamoeba species.
- 61. Describe the epidemiology of falciparum malaria in India. Add a note on laboratory diagnosis of the condition.
- 62. Clinical manifestations and diagnosis of intestinal coccidian infection in HIV patients.
- 63. Discuss recent approaches for diagnosis of lymphatic filariasis.
- 64. Discuss the epidemiology of dermatophyte infections in India. Add a note on laboratory diagnosis of the condition.

## M.D. DEGREE EXAMINATION – APRIL, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Describe the behaviour change communication approach
- 56. Discuss the community participation in Reproductive and Child Health Programme
- 57. Discuss the strategy for implementation of Emergency Obstetric Care at first referral unit
- 58. Suggest how you will plan for implementation of Integrated Management of Neonatal and Child Health in a district.
- 59. Population Policy of your State
- 60. Disinfection of water at household and community level.
- 61. Occupational cancers
- 62. Health problems of coal miners.
- 63. Organization and functioning of Anganwadi centre
- 10. Describe in brief role of ASHA.

## M.D. DEGREE EXAMINATION – APRIL, 2013 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Cognitive theory and cognitive behaviour therapy in panic disorder
- 56. Clinical features, differential diagnosis and management of somatization disorder.
- 57. Clinical features, comorbidities and management of anxious avoidant personality disorder.
- 58. Neurobiology of Bipolar disorder.
- 59. Concepts, clinical features and differential diagnosis of Acute and Transient Psychoses.
- 60. Management of treatment resistant depression
- 61. Classification, clinical features and management of male sexual dysfunctions.
- 62. Psychiatric and medical complications of cocaine abuse
- 63. Different regimes of management of opioid withdrawal.
- 10. Clinical features and management of transvestism.

## M.D. DEGREE EXAMINATION – APRIL, 2013 BIOCHEMISTRY

## Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Discuss the source, RDA, biochemical functions and deficiency of Vitamin A.
- 56. Discuss in detail causes and biochemical investigation of iron status in the body.
- 57. Discuss sources, chemistry and metabolic functions of Vitamin D. Explain the hormonal regulation of serum calcium levels.
- 58. Write briefly on:
  - A) Balanced diet
  - B) Malabsorption syndrome
- 59.A 14 year old girl was brought to the casualty with altered sensorium and a history of significant weight loss in the last 4 months, increased thirst and increased urination. On examination patient was found to be dehydrated and drowsy. Biochemical investigations revealed random blood glucose 600 mg /dI, urine ketones present, urine sugar\*\*++, blood pH 7.2
  - A) What is the probable diagnosis? Explain the biochemical and metabolic basis for the clinical and lab findings.
  - b) Describe the role of insulin in the regulation of blood glucose levels.
- 60. Discuss the functions and associated disorders of catecholamines.
- 61. Discuss the biochemical functions and metabolism and associated disorders of:
  - A) Magnesium
  - B) Iodine
- 62. Justify the dietary requirement of Selenium. How is Selenocysteine synthesized in the body?
- 63. Describe with the help of a diagram, the hormonal changes during normal pregnancy.
- 10. Nutritional assessment of dietary protein.

## M.S. DEGREE EXAMINATION – APRIL, 2013 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Rapidly acting insulins
- 65. Bisphosphonates
- 66. Oral contraception for men
- 67. Radioactive Iodine
- 68. Anti-retroviral drugs
- 69. GnRH analogues
- 70. Anti-Pseudomonal antimicrobials
- 71. Antiplatelet agents
- 72. Erythropoietin
- 10. Drug therapy of Scabies

## M.D. DEGREE EXAMINATION – APRIL, 2013 FORENSIC MEDICINE

## Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Dissection of neck structures
- 56. PCR Technique.
- 57. Evidentiary materials in gunshot wounds
- 58. Diagnostic difficulties of snake bite deaths.
- 59. Second autopsy
- 60. Café coronary
- 61. Limitations of skeletal remains examination.
- 62. Non accidental injuries in children
- 63. Errors in post-mortem examination and reporting
- 10. Mechanism of head injury

## M.D. DEGREE EXAMINATION – APRIL, 2013 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Explain the genesis of slow wave sleep and REM sleep
- 65. Define synaptic, plasticity and discuss its relation to learning
- 66. Taste pathway.
- 67. Discuss the formation, circulation, composition and functions of aqueous humour in eye
- 68. Regulation of cardiac output
- 69. Oxygen therapy.
- 70. Explain limbic system and enumerate functions of the system
- 71. Trichromatic theory of colour vision.
- 72. Discuss the nervous regulation of respiration.
- 10. Explain weightlessness in space.

# M.D. DEGREE EXAMINATION – APRIL, 2013 RADIOTHERAPY

Paper-III: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Describe the histopathological classification of Hodgkin lymphoma. Discuss the management of a stage II patient with bulky mediastinal disease.
- 11. Define heterotopic ossificans and the role of radiotherapy in the prevention of this condition.
- 12. Classify malignant tumors of skin and discuss the management of basal cell carcinoma.
- 13. Discuss the management of T3N1M0 carcinoma rectum.
- 14. Discuss the management of a patient with small cell ca lung with mediastinal lymphadenopathy but no distant metastases.
- 15. Discuss the management of localized intermediate risk prostate carcinoma. Add a note on Gleason scoring system.
- 16. Write the clinical grouping of Rhabdomyosarcoma. Discuss the management of orbital Rhabdomyosarcoma in a 7 year old child
- 17. Discuss the management of juvenile nasopharyngeal angiofibroma with intracranial extension.
- 18. Write the staging of malignant testicular tumours. How will you manage a stage IA seminoma testis.
- 19. Write the staging classification of ovary. Discuss the management of stage IIIC serous cystadenocarcinoma ovary.

## M.S. DEGREE EXAMINATION – APRIL, 2013 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Classify cleft lip and palate. Discuss the management of complete cleft.
- 56. Pathophysiology of venous ulcers. Discuss their management options.
- 57. Discuss the clinical features, staging and management of Nephroblastoma.
- 58. Discuss briefly the various AIDS related malignancies.
- 59. Discuss the risk factors, histopathological types and management of Malignant Melanoma
- 60. Discuss the clinical features, investigations and management of intussusception.
- 61. Describe the etiopathology of urolithiasis and discuss the investigations and management of renal calculi.
- 62. Describe the clinical features and management of carcinoma head of pancreas.
- 63. Discuss the classification and management of benign breast diseases
- 64. Classify the inflammatory disorders of thyroid gland and add a note on their management.

## M.S. DEGREE EXAMINATION – APRIL, 2013 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Villonodular synovitis
- 56. Partial Claw hand
- 57. Ewing's Sarcoma
- 58. Perthes disease
- 59. Investigations in multiple myeloma
- 60. Gorham's disease
- 61. Management of Pott's paraplegia
- 62. Frozen shoulder
- 63. Congenital Pseudoarthrosis of tibia
- 10. Brodie's Abscess

# M.S. DEGREE EXAMINATION – APRIL, 2013 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Describe the safe cataract surgery in diabetes.
- 58. Merits and demerits of various anti glaucoma drugs.
- 59. Surgical intervention in Keratomycosis
- 60. Management of Cytomegalovirus Retinitis
- 61. Management of BRVO (Branch Retinal Vein Occlusion)
- 62. Describe the efficacy of synthetic and biologic adhesives in Ophthalmology.
- 63. Sympathetic Ophthalmitis.
- 64. Composition and role of District Blindness Control Society.
- 65. Define Myopia and write etiology, Fundus Picture and various modes of management of Myopia.
- 66. Write shot notes:
  - c) Intra Ocular Lens Power Calculation
  - d) Principle of Retinoscopy

## M.D. DEGREE EXAMINATION – APRIL, 2013 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Discuss the management of ear trauma following a road traffic accident.
- 56. Role of stroboscopy in voice disorders
- 57. Causes and management of acute otalgia
- 58. Photodynamic therapy for head and neck cancers.
- 59. Buccal leukoplakia in a 50 year old female
- 60. Causes and management of stridor in a 60 year old male
- 61. Management of ethmoidal polyposis
- 62. Evaluation of a snoring in a 40 year old male
- 63. Management of N0 neck in laryngeal cancer
- 10. Write the etiology, clinical features and management of atrophic rhinitis

## M.D. DEGREE EXAMINATION – APRIL, 2013 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Turner's syndrome.
- 56. Histology of Pituitary Gland
- 57. Preparation of Museum Specimens from Dissection Specimens.
- 58. Hemophilia
- 59. Microscopic structure of liver
- 60. Genetic counseling
- 61. Albinism.
- 62. Describe fixation, mention common fixatives used.
- 63. Histology of Salivary Glands.
- 10. Down's syndrome (Mongolism)

## M.D. DEGREE EXAMINATION – APRIL, 2013 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Gay Bowel Syndrome
- 65. Side effects of Anti-Leprosy drugs
- 66. Post exposure prophylaxis
- 67. Eye involvement in Leprosy
- 68. HAART
- 69. Endemic Treponematoses
- 70. Relapse in Leprosy
- 71. Control of Leprosy
- 72. Tertiary Syphilis
- 10. Pathogenesis of Leprosy

# M.D. DEGREE EXAMINATION – APRIL, 2013 HOSPITAL ADMINISTRATION

## Paper-III - Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Role of Hospital Administrator
- 56. Physician Patient Relation
- 57. Public Relations in Hospital
- 58. Hospital Security.
- 59. Medical Negligence and Consumer Protection Act
- 60. Medical ethics
- 61. Telemedicine
- 62. Architect's brief
- 63. HVAC system in modern OT department
- 10. Commissioning of new hospital

## M.D. DEGREE EXAMINATION – APRIL, 2013 GENERAL MEDICINE Paper-IV – Tropical Medicine

Max. Marks: 100

Note: Answer all questions

Time: 3 Hours

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Tropical Pancreatitis.
- 38. Pernicious Malaria
- 39. Approach to fever with Jaundice
- 40. Copper Sulphate Poisoning
- 41. Criteria for Rheumatic fever and Rheumatic Heart Disease
- 42. Management of Tetanus
- 43. Heat Exhaustion
- 44. Tropical Spastic Paraplegia.
- 45. Lepra Reaction
- 10. H1N1 Vaccine

## M.S. DEGREE EXAMINATION – APRIL, 2013

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Complications of laparoscopic surgery.
- 38. Recent trends in the surgical management of stress incontinence
- 39. Cryo Surgery Various methods and its complications.
- 40. Principles of tubal micro surgery.
- 41. Surgical management of cervical incompetence.
- 42. Management of amniotic fluid embolism
- 43. Primi with unruptured ectopic pregnancy with a sac size of 1.8cm discuss the management
- 44. Critical analysis of various ovulation induction drugs.
- 45. Chemotherapy in ovarian cancer
- 10. Anti convulsants in pregnancy

# M.D. DEGREE EXAMINATION – APRIL, 2013 PAEDIATRICS

## Paper-IV - Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Management of Community Acquired Pneumonia.
- 38. Management of Cyanotic Heart Disease
- 39. Treatment of Nephrotic Syndrome.
- 40. Evaluation of Hepatosplenomegaly.
- 41. Approach to child with bleeding diathesis
- 42. Investigations of child with Lymphadenopathy.
- 43. Diagnosis of Inborn errors of Metabolism.
- 44. Short notes:
  - a) Classify convulsions
  - b) Management of Status Epilepticus
- 45. Approach to child with bleeding per rectum.
- 10. Congenital anomalies of genito urinary system.

## M.D. DEGREE EXAMINATION – APRIL, 2013 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Discuss the management of disseminated intra vascular coagulation during surgery.
- 39. Write a note on Nerve blocks for cataract surgery in elderly patients.
- 40. What are the types of Anaemia? What are the problems involved during anaesthesia in anaemic patients?
- 41. Discuss anaesthetic management of a 70 year old man diabetic on oral anti diabetic drugs for total Hip replacement.
- 42. What are the causes of intraoperative Bronchospasm. Add a note on its management.
- 43. Discuss the causes and management of post operative jaundice.
- 44. Enumerate the causes of delayed recovery after general anaesthesia.
- 45. Write a short essay on Hepato renal syndrome.
- 46. Write a note on permissive hypercapnia
- 10. Write a note on acid aspiration prophylaxis.

# M.D. DEGREE EXAMINATION – APRIL, 2013 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Describe the role of recombinant DNA technology in pathology.
- 38. Describe the immunologic basis of organ transplantation.
- 39. Discuss the current concepts in pathology of chronic hepatitis
- 40. Write about the recent advances in pathology of urothelial neoplasms
- 41. Discuss the current concepts on Hodgkin lymphoma
- 42. Write about cancer vaccines
- 43. Write about the recent advances on plasma cell dyscrasias.
- 44. Write about quality assurance in cytopathology.
- 45. Discuss recent advances in atherogenesis
- 10. Write about genomic imprinting.

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## M.D. DEGREE EXAMINATION – APRIL, 2013 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Discuss the advances in imaging and management of ischemic stroke
- 30. Discuss the principles, instrumentation and methodology of PET imaging. Elaborate on its role in head and neck cancers.
- 31. Describe segmental anatomy of the liver. Discuss imaging in liver transplantation.
- 32. Write short note on:
  - a) MR imaging of placenta
  - b) Flat panel detector
  - c) Cartilage imaging
  - d) Pharmacological agents used in cardiac CT & MRI
  - e) Intraductal papillary mucinous tumor of pancreas
- 33. Describe High intensity focused ultrasound (HIFU) Principle, instrumentation and its applications.
- 34. Discuss the role of PET scanning in Gastrointestinal disorders.
- 35. Write short note on:
  - a) Imaging in brain death
  - b) Nodal imaging on MR
  - c) Imaging of breast implant
  - d) Susceptibility weighted imaging
  - e) MR Tractography
- 36. What are isotopes? What is the principle of SPECT? Mention the common applications of radionuclide isotopes in diagnostic radiology.
- 37. Discuss the principles and basis of CT perfusion imaging and its various assessment parameters. Define the role of CT perfusion in onco imaging.
- 38. Discuss various images guided Musculoskeletal interventions.

## M.D. DEGREE EXAMINATION – APRIL, 2013 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. MDR TB in RNTCP
- 38. Gene therapy in pulmonary diseases.
- 39. VATS (Video assisted thoracoscopic surgery).
- 40. Chronic renal failure and lung.
- 41. Management of ARDS
- 42. Impact of RNTCP-DOTS on epidemiology of tuberculosis in India.
- 43. Mechanical ventilation
- 44. Immunotherapy in Bronchial asthma
- 45. Therapeutic Bronchoscopy
- 10. 6 Minute walk test (6MWT)

## M.D. DEGREE EXAMINATION – APRIL, 2013

#### MICROBIOLOGY

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Give an account of vaccines against rabies virus
- 38. Discuss automation in microbiology
- 39. Give an account of food borne parasitic diseases
- 40. Discuss molecular methods in diagnosis of protozoal infections
- 41. Discuss the agents of bioterrorism.
- 42. Discuss the epidemiology and laboratory diagnosis of measles, mumps and rubella in India. Add a note on preventive strategy of the condition.
- 43. Discuss vancomycin intermediate resistant Staphylococcus aureus (VISA) in detail.
- 44. List the agents of meningitis and discuss the laboratory diagnosis of the disease.
- 45. Give an account of tuberculosis in HIV. Add a note on revised DOT programme
- 10. Discuss recombinant antigens and their use in diagnostic microbiology

# M.D. DEGREE EXAMINATION – APRIL, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 39. Discuss the organization and functioning of Community Health Centers.
- 40. Discuss the salient features of Mudaliar Committee report
- 41. Community Based Health Insurance
- 42. Surveillance for Polio Eradication
- 43. Describe the principle and objectives of Health Education
- 44. Describe in brief the objectives and strategy of reproductive and Child Health Programme
- 45. Health Care in Tribal and Remote areas
- 46. Describe in brief the National Blindness Control Programme
- 47. Describe the salient points from National Health Policy 2002.
- 48. Discuss the Health Care Delivery in Urban Slums.

## M.D. DEGREE EXAMINATION – APRIL, 2013

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Procedure, uses and adverse effects of deep brain stimulation in psychiatry.
- 38. Clinical features, differential diagnosis and management of conduct disorder.
- 39. Features, consequences and management of child sexual abuse
- 40. Testamentary capacity.
- 41. Features of the Narcotic drugs and psychotropic substances act.
- 42. Causes, clinical features and management of old age psychoses.
- 43. Pharmacology, adverse effects and uses of iloperidone.
- 44. The extent and causes of Placebo effect of antidepressants and its implications
- 45. Research on preventive psychiatry.
- 10. Boundary issues in psychotherapy.

## M.D. DEGREE EXAMINATION – APRIL, 2013 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. A 35 year old woman was admitted in the hospital with history of recurrent pain in the abdomen, developed jaundice 2 days later. Past history revealed that the pain often aggravated after in take of fatty food. Routine urine examination showed the presence of bile pigments and bile salts, but urobilinogen was absent.
  - a) What is the probable diagnosis?
  - b) Give reasons for the excretion of bile pigments and bile salts in urine.
  - c) Justify which other biochemical tests should be done in this patient to confirm the diagnosis.
- 38. Classify tumor markers. What is an ideal tumor marker? Discuss the role of molecular markers for cancer diagnosis
- 39. A 55 year old man who is a known smoker developed worsening cough with thick sputum and was admitted to hospital with difficulty in breathing. He was drowsy and cyanosed. His arterial blood gas analysis was as follows:
  - $P^{H}$  7.2,  $p^{CO2}$  70mm  $H_{g}$ , HCO3 26 mmol/L, PO2 50 mm  $H_{g}$ 
    - a) What is the probable acid-base disturbance? Mention the probable causes of the same
    - b) Explain how the primary defect can be compensated in the body.
- 40. Discuss the analytical errors commonly encountered in the Clinical Biochemistry lab.
- 41. Write briefly on:
  - a) Homocystinuria
  - b) EQAS
- 42. Explain the various biochemical and calculated methods of determining glomerular filtration rate.

Contd...2

- 43. What are the tests done to analyse whether an ascitic fluid is a transudate or exudate? What is SAG? How is it important?
- 44. Discuss the biochemical tests done for screening a pregnancy in a 41 year old woman.
- 45. What are the types of electrolyte disturbances encountered in a patient of chronic kidney disease? Discuss.
- 46. Explain the significance of the biochemical tests used to diagnose myocardial infarction.

### M.D. DEGREE EXAMINATION – APRIL, 2013

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Drug therapy of vomiting
- 38. Antiproliferative drugs
- 39. Direct Thrombin inhibitors
- 40. Orphan drugs
- 41. Drug therapy of Prostate cancer
- 42. Microbicides
- 43. Pharmacotherapy of SIADH (Syndrome of Inappropriate Anti Diuretic Hormone secretion)
- 44. Drug therapy of Acne
- 45. Fospropofol
- 10. Drug abuse in sports

## M.D. DEGREE EXAMINATION – APRIL, 2013 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. 'Murder in Womb'
- 38. Role of National Human Rights Commission.
- 39. Doping in Sports.
- 40. Chemical warfare agents
- 41. Alcohol and road traffic accidents.
- 42. Medical records as evidentiary material
- 43. Brain fingerprinting.
- 44. Care and Protection of Children Act.
- 45. Poison Information Centre.
- 10. Classification of pesticides

# M.D. DEGREE EXAMINATION – APRIL, 2013 SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Physiological jaundice
- 38. How are aerobic exercises helpful in maintaining good health?
- 39. Describe the role of yoga on behavioral pattern of human being
- 40. What is electromyography? What is its clinical application?
- 41. Pregnancy diagnostic test
- 42. How pheromones affect behaviour in human?
- 43. What is the basis for referred pain?
- 44. Genetic mutations that cause congenital deafness.
- 45. Explain the benefits of athletic training on cardiovascular system and other systems of the body.
- 10. Heat stroke

## M.D. DEGREE EXAMINATION – APRIL, 2013

#### RADIOTHERAPY

Paper-IV: Clinical subjects in relation to Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Discuss the screening for early detection of ca breast
- 11. Discuss the WHO ladder of pain management for cancer patients
- 12. Enumerate the personnel monitoring devices for radiation protection. Add a note on TLD batch
- 13. Write a short note on hypofractionation.
- 14. Hypoxic cell sensitizers
- 15. Discuss the advantages and disadvantages of preoperative versus postoperative radiotherapy.
- 16. Write a short note on high LET radiotherapy
- 17. Discuss the physical properties of iridium 192
- 18. Discuss the QA of an HDR Brachytherapy unit.
- 10. Write a short note on gamma knife.

### M.S. DEGREE EXAMINATION – APRIL, 2013 GENERAL SURGERY

Paper-IV: General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 38. Describe Video Assisted Thoracoscopic Surgery.
- 39. Classify enterocutaneous fistulas. Discuss briefly their management.
- 40. Discuss the clinical features and management of Graves disease
- 41. Discuss lasers in General Surgery
- 42. Classify common Bile duct injuries and discuss their management.
- 43. Discuss briefly the clinical features and treatment options of Chronic Pancreatitis.
- 44. Discuss the management of corrosive oesophageal stricture
- 45. Describe the clinical features and management of bowel ischemia
- 46. Discuss the indications and describe various laparoscopic hernia repairs.
- 47. Discuss Child's criteria and describe the various shunt procedures in the management of Portal Hypertension.

## M.S. DEGREE EXAMINATION – APRIL, 2013 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. MRI in Orthopedics.
- 38. Hip Resurfacing Arthroplasty
- 39. Arthroscopy of knee
- 40. Antibiotic impregnated cement
- 41. Posterior instrumentation in spine
- 42. Floor Reaction Orthosis
- 43. Biodegradable implants
- 44. Surgical management of Proximal Humeral fractures
- 45. Bone Densitometry
- 10. Recent advances in management of sub-trochanteric fractures.

### M.S. DEGREE EXAMINATION – APRIL, 2013 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 39. Discuss the management of spring catarrh with newer drugs and their benefits over conventional drugs.
- 40. Gene therapy
- 41. Optical Coherence Tomography.
- 42. Uses of Botulinum Toxin in Ophthalmology
- 43. Management of Macular Hole.
- 44. Clinical uses of C.T. Scan in Ophthalmology
- 45. Coagulative Lasers in Ophthalmology
- 46. Vision 2020.
- 47. Recent advances in low vision aids
- 48. Write short notes on:
  - c) Indocyanine Green Angiography
  - d) Ocular side effects of Sildenafil (Viagra)

### 183-NR M.S. DEGREE EXAMINATION – APRIL, 2013 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Discuss the surgical technique of cochlear implantation.
- 38. Acoustic and aerodynamic evaluation of voice quality
- 39. Complications of stapedectomy
- 40. Surgical landmarks for facial nerve during mastoid surgery.
- 41. Endoscopic trans-nasal hypophysectomy
- 42. Management of post traumatic CSF otorrhoea
- 43. Fibre-optic endoscopic evaluation of swallowing
- 44. Management of Cellulitis of the sub-maxillary space
- 45. Secondary trachea-esophageal puncture
- 10. Role of microdebriders in ENT

## M.D. DEGREE EXAMINATION – APRIL, 2013 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- **41.** Development of Kidney and its congenital anomalies.
- **42.** Development of skin and its appendages
- **43.** Development of Palate and its anomalies
- **44.** Thalamus and its connections.
- **45.** Meckel's Diverticulum
- **46.** Blood supply of cerebral Hemisphere.
- **47.** Neural crest and its derivatives
- **48.** Placenta Praevia and its types
- 49. Hydrocephalus
- **50.** Oculomotor nerve and its Lesions

### M.D. DEGREE EXAMINATION – APRIL, 2013

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Porphyria Cutanea Tarda
- 38. Lipoid Proteinosis
- 39. Toxic Shock Syndrome
- 40. Erythema Gyratum Repens
- 41. Cutaneous manifestations of Sepsis
- 42. Ectodermal Dysplasia
- 43. Clinical features of Cutaneous T-Cell Lymphoma
- 44. Telangiectasia Macularis Eruptiva Perstans
- 45. Fabry Disease
- 10. Xanthoma

#### M.D. DEGREE EXAMINATION – APRIL, 2013

#### HOSPITAL ADMINISTRATION

Paper-IV – Administration of Clinical and Non-Clinical Services and Administrative procedures

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. OPD as shop-window of hospital
- 65. HVAC system in NICU
- 66. Pre-Hospital care for Trauma services
- 67. Embalming in hospital
- 68. ETO Sterilization
- 69. Menu Planning
- 70. Radiation safety in CT Scan Centre
- 71. Drug Formulary
- 72. Marketing of Hospitals
- 10. Health Literacy

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013 GENERAL MEDICINE

Paper-II – Disorders of CVS, respiratory system, Kidney, GIT including liver and pancreas

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 56. Pulmonary thrombo embolism causes, clinical features and management.
- 57. Infective Endocarditis: clinical features and management.
- 58. Sarcoidosis: pathogenesis, clinical features and management.
- 59. Discuss the complications and management of chronic pancreatitis.
- 60. Discuss about Bartter's and Gitelman Syndromes.
- 61. Describe the indications and recommendations for antiviral therapy for Chronic Hepatitis C.
- 62. Emerging Therapies and Strategies in treatment of heart failure.
- 63. What are the types of Renal Tubular Acidosis? How do you diagnose and manage them?
- 64. COPD: clinical features and management.
- 65. Write briefly about complex adult congenital heart disease.

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013 OBSTETRICS & GYNAECOLOGY

### Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Enumerate the indications for preconceptional counseling What are the benefits of preconceptional counselling? Describe counseling for any one condition.
- 2) Describe management of unruptured ectopic pregnancy in a woman with 5 weeks amenorrhoea.
- 3) What is invasive mole? How will you diagnose? Describe the differential diagnosis for invasive mole.
- 4) Examination of a newborn baby.
- 5) How do you diagnose and manage adherent placenta?
- 6) What is the aetiology of puerperal sepsis and how can it be prevented?
- 7) Define perinatal mortality and enumerate the causes of perinatal mortality?
- 8) Discuss the techniques and complications of cerclage operation in pregnancy.
- 9) Jaundice in Newborn.
- 10) Prevention of parent to child transmission in HIV positive pregnancy.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- What are the causes of intrauterine growth restriction (IUGR)? Mention the complications of IUGR and their management.
- 2) Discuss about definition, epidemiology, clinical feature and treatment of autistic disorder.
- 3) Discuss about red flags in child development, developmental screening and management of the child early sign of developmental delay.
- 4) Diagnosis and management of Meconium aspiration syndrome.
- 5) Etiology and management of congestive cardiac failure in newborn.
- 6) Common sleep disorders in children.
- 7) Infant of diabetic mother.
- 8) Describe the causes of infant mortality and discuss the preventive measures for reducing it.
- 9) Psychosomatic disorders in childhood and adolescence.
- 10) Write briefly about objectives of school health services and Health problems in school children.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013

#### ANAESTHESIOLOGY

Paper-II: Anaesthesia in relation to associate systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe your anaesthetic plan in Primi in II semester posted for emergency laparoscopic appendicectomy.
- 2) Write about intraoperative and post operative problems and anaesthetic management for a 35 years male patient posted for Rt. Lower lobectomy.
- 3) Describe the role of Day care anaesthesia in pediatric surgical procedures. What are the special problems?
- 4) Discuss the plan and anaesthetic management in a 50 years patient posted for abdominal aorta aneurysmal clipping.
- 5) Discuss in detail the anaesthetic management of a case of Pheochromocytoma.
- 6) Discuss the anaesthetic management of 70 years aged woman on treatment of Rheumatoid arthritis for total hip replacement.
- 7) Mention the complications of spinal and epidural anaesthesia. Briefly mention the method of prevention and treatment.
- 8) A 40 years old man was posted for emergency laparotomy for bowel perforation. He is known asthmatic. Discuss the anaesthetic management of this case.
- 9) Discuss the preanaesthetic evaluation preparation and anaesthetic management of a patient with thyrotoxicosis complicated by Atrial fibrillation.
- 10) Write about role of hypotensive anaesthesia in functional endoscopic sinus surgery (FESS).

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Pathogenesis and clinical features of cardiomyopathy.
- Describe the pathogenesis of chronic gastritis. Mention various types.
- 3) Discuss etiopathogenesis and pathology of non-infectious vasculitis.
- 4) Discuss alcoholic liver disease.
- 5) Discuss the pathology of mesenchymal tumors of kidney.
- 6) Value of immunofluorescence techniques in diagnosis of skin disorders.
- 7) Discuss the bone diseases caused by osteoclast dysfunction and abnormal mineral homeostasis.
- 8) Describe the role of imaging in cholangiocarcinoma.
- 9) Classify degenerative diseases of brain and discuss about Alzheimer's disease.
- 10) Discuss pathology of cartilaginous tumors.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 RADIO DIAGNOSIS

Paper-II: Components of MD Radio diagnosis (clinical radiology and imaging related to gastrointestinal tract, genitourinary tract and Obstetrics and Gynecology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 1) Imaging features of Torsion of the Testis.
- 2) Discuss the role of imaging in renal transplant.
- 3) Role of ultrasonography and Doppler in ectopic pregnancy.
- 4) How do you investigate a case of dysphagia and discuss various esophageal disorders?
- 5) What is Intersex? How do you evaluate of case of Ambiguous genitalia?
- 6) Describe the embryological development of pancreas. Discuss radiological evaluation of acute pancreatitis.
- 7) Mention the causes of upper Gl obstruction in neonate. Describe the imaging features of congenital hypertrophic pyloric stenosis.
- 8) Describe the role of imaging in cholangio carcinoma.
- 9) What is the role of 3D ultrasound in detection of fetal anomalies?
- 10) Discuss the role of ultrasound in paediatric abdominal emergencies.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss clinical issues in implementation of DOTS How will you strengthen RNTCP through Medical Colleges?
- 2) HIV related tuberculosis in children's and adults.
- 3) How will you diagnose and treat a case of MDR Tuberculosis?
- 4) Write a note on clinical features, diagnosis and treatment of Endobronchial Tuberculosis.
- 5) TB IRIS.
- 6) Discuss the various studies of BCG vaccination and its protection.
- 7) Massive Haemoptysis in case of pulmonary tuberculosis.
- 8) Tuberculosis emphysema.
- 9) Discuss about Firefly Luciferase reporter gene in Tuberculosis.
- 10) Discuss Tuberculosis and its management in pregnancy.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Explain the mechanism of action and methods of detection of enterotoxin.
- 2) Discuss the etiology and laboratory diagnosis of pyogenic meningitis.
- Classify Rickettsiae. Write in detail culture, pathogenesis and lab diagnosis of Q fever.
- 4) Classify Mycoplasma. Write morphology, culture, pathogenesis, lab diagnosis of Mycoplasma Pneumonia.
- 5) Laboratory diagnosis of Corynebacterium diphtheria.
- 6) Describe the pathogenesis and laboratory diagnosis of anthrax.
- 7) Write in detail about the laboratory diagnosis of syphilis.
- 8) Write an essay on pathogenesis, laboratory diagnosis and prophylaxis of pertussis.
- 9) Laboratory diagnosis of Urinary tract infection. Add a note on non gonococcal urethritis.
- 10) Discuss causative agents of food poisoning. Explain about Bacillus cereus.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 COMMUNITY MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the epidemiology, prevention and control of hypertension in view of the World Health Day theme 2013.
- 2) Sir-Bradford Hills criteria of causality in Epidemiology.
- 3) Clinical epidemiology and its uses.
- 4) Discuss the ethical issues in epidemiological studies.
- 5) Describe the success story of "Polio eradication" from India.
- 6) Describe the Epidemiology, control and preventive measures of Rabies in India.
- 7) Integrated Management of Neonatal and Childhood illness (IMNCI).
- 8) Describe all the steps of "Case Control Study" with an example.
- 9) Disability prevention and medical rehabilitation in Leprosy.
- 10) Discuss the epidemiology, prevention and control of avian influenza.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Approach to a patient with medically unexplained symptoms.
- 2) Psychiatric aspects of Cardiovascular disorders.
- 3) Discuss about the neuropsychiatric aspects of Traumatic Brain Injury.
- Behavioural symptoms related to Dementias Importance and management.
- 5) Psychosocial aspects of cancer.
- 6) Psychosocial evaluation in sex Reassignment surgery.
- 7) Management and Prognosis of Delirium.
- 8) Counselling in HIV and AIDS.
- 9) Role of psychiatrist in terminally ill patients.
- 10) Consultation liaison psychiatry.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Catabolism of Purine nucleotides and associated disorders.
- 2) Classification and functions of Heteropolysaccharides.
- 3) Phase one reactions of Biotransformation.
- 4) Explain Covalent modification with examples.
- 5) Explain the polyol pathway and its significance.
- 6) Complex V of Electron transport chain and its working model.
- 7) a) Polyamines
  - b) Cystathionine βeta synthase deficiency
- 8) a) Fatty acid synthase complex.
  - b) Cyclo oxygenase inhibitors.
- 9) Disorders of Urea cycle.
- 10) A 2 year old child presented with liver enlargement. On investigation blood glucose was 50 mg% Lactic acid was increased and ketone bodies were present in the Urine. What is your probable diagnosis? Explain why.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Epidural anaesthesia.
- 2) GABA receptor modulators in therapeutics.
- 3) Use of Diuretics in different types of edema. Add a note on newer agents.
- 4) Synthetic and semi synthetic atropine substitutes.
- 5) Role of NO in cardiovascular system and coronary vasodilators in treatment of Angina.
- 6) Newer anti epileptic agents Pharmacological and Therapeutic Profile.
- 7) Muscarinic Agonists.
- 8) Alcohol de-addiction.
- 9) Experimental methods to evaluate CNS drugs.
- 10) SEROTONIN Syndrome.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 13 FORENSIC MEDICINE

Paper-II: Pathology and Microbiology in relation to forensic medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

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#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Uses of Microbiology in Forensic Medicine and Toxicology.
- 2) Pathophysiology of anaphylactic shock.
- 3) Bio-safety conditions during autopsy.
- 4) Tissue preservation for Microbiology and Pathology studies.
- 5) Amniotic Fluid Embolism.
- 6) Medico-legal importance of wound healing.
- 7) Hypersensitivity and medico-legal importance.
- 8) Write in detail about the thermoregulatory of the body.
- 9) Pathophysiology of myocardial infarction.
- 10) Importance of cerebrospinal fluid in medico-legal perspective.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2013 PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- What is normal ECF volume? Explain method of calculation of ECF volume in a given patient.
- 2) Explain synthesis of testosterone hormone. Explain its main actions.
- 3) Name three phases of menstrual cycle. Explain hormonal basis.
- 4) Name theories of coagulation of blood, explain Macfarlane theory.
- 5) What is normal TMG and its normal value? Explain symport mechanism in kidneys?
- 6) Role of kidney in Potassium Homeostasis
- 7) Antibody mediated immunosuppression.
- 8) Stress hormones.
- 9) G.I. hormones.
- 10) Double Bohr effect.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013

#### **RADIOTHERAPY**

Paper-II: CNS, Head & Neck, Orbit thyroid, Lung and Mediastinal malignancies, malignancies breast esophagus, lymphomas, leukemia's and pediatric tumors.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Classify Bone Tumors. Discuss the management of localized Ewings Sarcoma.
- Pathological classification of CNS tumors. Discuss the management of craniopharyngioma.
- 3) 33 years old has 3x3 cm lesion in the hard palate. How do you manage?
- 4) Role of Radiotherapy in Hodgkins Lymphoma.
- 5) Chemo irradiation in Ca. Anal Cancer.
- 6) Describe whole abdomen irradiation and moving strip technique.
- 7) Management of olfactory Neuroblastoma.
- 8) Role of Prophylactic irradiation in cancer treatment.
- 9) Prevention and management of Radiation Proctitis.
- 10) Partial Breast irradiation.

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# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2013 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss the differential diagnosis and management of ulcer foot.
- 2) Management of polytrauma patients with penetrating injuries of chest and blurt injury of abdomen.
- 3) Le forts classification of Facio-maxillary trauma and its management.
- 4) Describe the clinical feature and management of supracondylar fracture of humerus.
- 5) Discuss the etiopathology, clinical features and management of oesophageal varices.
- 6) Aetio-pathology, clinical features and treatment of disseminated intra vascular coagulation.
- 7) Classify hemorrhage and write in detail about hemostatic methods employed in general surgery.
- 8) Posterior dislocation of shoulder.
- 9) Basic principles of laparoscopic surgery.
- 10) Principles of metabolic surgery and various operative procedures adopted.

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013 ORTHOPAEDICS

Paper-II: Traumatology & Rehabilitation

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

- 1. Techniques of tendon repair.
- 2. Surgical options of Trochanteric fractures.
- 3. Pre contoured plates and rods.
- 4. Post surgical complications of total Hip arthroplasty.
- 5. Dorsolumbar Injuries of Spine.
- 6. Post Traumatic avascular necrosis of scaphoid bone.
- 7. Recurrent dislocation shoulder Evaluation and management.
- 8. Classify epiphyseal injury. Enumerate treatment prognosis and complications.
- 9. Management of distal radial fractures.
- 10. Meniscal injuries of knee joint.

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# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION-DECEMBER,13 OPHTHALMOLOGY

Paper-II: Lids, Ocular adnexa, systemic ophthalmology, neuro ophthalmology, community ophthalmology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) How do you investigate and manage a case of Fungal Keratitis?
- 2) Surgical treatment options for keratoconus.
- 3) Ocular manifestations of toxoplasmosis.
- 4) Diagnosis and management of intraocular foreign body.
- 5) Management of Vitreous Hemorrhage.
- 6) Congenital Glaucoma classification, signs, symptoms and management.
- 7) How do you investigate pseudoglioma?
- 8) Clinical features and management of malignant melanoma of choroid.
- Describe the aetiology, pathogenesis of various types of Entropion.
   Describe surgical treatment of senile Entropion with surgical principles.
- 10) Describe the following:
  - a) D.B.C.S.(District Blindness Control Society)
  - b) How do you conduct survey of prevalence of corneal blindness in a village?

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2013 OTORHINOLARYNGOLOGY

Paper-II: Diseases of ear, nose and throat, surgical pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- How do you manage a case of sudden sensory neural hearing loss?
- 2. Write about the Rhabdomyosarcoma of head and neck.
- Discuss the ENT manifestations in unconscious head injury patient.
- 4. Discuss about the cerebro pontine angle tumour and its management.
- 5. Describe the acute mestatoiditis and its management.
- 6. Discuss in detail about sigmoid sinus thrombophobitis.
- 7. Epistaxis and its management in a 60 year elderly patient.
- 8. Write in detail the aetiology and management of papilloma larynx.
- Discuss the aetiology, types and management of stricture oesophagus.
- 10. Write the causes, clinical features and management of bilateral

Abductor paralysis.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2013

#### **ANATOMY**

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Intrinsic muscles of the hand.
- 2) Describe Gross Anatomy of Mammary gland.
- 3) Describe the Anatomy of prostate gland.
- 4) Relations and lymphatic drainage of stomach.
- 5) Describe the soft palate.
- 6) Describe boundaries and contents of Middle Ear.
- 7) Thoracolumbar Fascia.
- 8) Connections and distribution of parasympathetic ganglion of head and neck.
- 9) Describe the Hip-Joint.
- 10) Obturator Nerve.

## M.D. DEGREE EXAMINATION – DECEMBER,2013 D.V.L.

### Paper-II: General dermatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Diagnosis, differential diagnosis and management of Psoriatic Arthropathy.
- 2) Relapsing Polychondritis.
- 3) Dermatophytic infections of scalp.
- 4) What is urticaria? Write about cold urticaria.
- 5) Hair growth disorders and write about telogen effluvium.
- 6) Classification of vitiligo and write about acrofacial vitiligo.
- 7) Skin diseases by protozoa and write about leishmaniasis.
- 8) Papilloma virus and cancer.
- 9) Differential diagnosis of pustular lesions in neonate.
- 10) Gomm Button disease.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2013 HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Case control and cohort studies with illustrations.
- 2) Application of statistical tests in Research Methodology.
- 3) Narrate the chronological sequence of steps for a Thesis / Dissertation.
- 4) Public private partnership (PPP).
- 5) Contributory Negligence Effect on Outcome of Medical Care Discuss.
- 6) Essential recommendations of BHORE committee.
- 7) Emergency Medical Services in Developed/Developing Countries.
- 8) Investigation of Hospital Acquired Infection.
- 9) Incidence and prevalence rates.
- 10) Chi Square test.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2013 IMMUNOHAEMATOLOGY AND TRANSFUSION MEDICINE

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Transfusion support in a case of warm Autoimmune Haemolytic Anaemia.
- 2) Acquired B Antigen.
- 3) ISBT code 128.
- Yersinia Enterocolitica infection and its significance in Transfusion
   Medicine.
- 5) Discuss the role blood groups in paternity testing.
- 6) Outline the indications in exchange transfusion. Principle and procedure for exchange transfusion in a two day old baby.
- 7) High titre and low avidity antibodies.
- 8) Discuss in detail non-infectious Hazards of Transfusion.
- 9) Bombay phenotype and para Bombay phenotype.
- 10) The key elements of pre transfusion testing in hospital Blood Bank.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,2013 EMERGENCY MEDICINE AND TRAUMA PAPER-II

Time: 3 hours Max. Marks: 100

NOTE: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) 25 year old man is brought to emergency unit with history of run over accident over his both lower limbs. Briefly mention the evaluation of the patient. What are the major problems anticipated and how do you investigate the patient?
- 2) 30 year old man stabbed repeatedly over the epigastric area in three different directions and is brought to emergency unit. What is you immediate process of evaluation? How do you manage if right side of the chest is silent on auscultation?
- 3) 19 year old girl is unconscious after a bee sting at her home. How do you evaluate and resuscitate this girl in emergency unit. What are the anticipated problems?
- 4) 45 year old male had head injury with GCS of 7/15. Bilateral fine crackles heard all over the chest. Write briefly about the evaluation and management.
- 5) Write short notes on alcohol withdrawal syndrome.
- 6) What is acute lung injury score? How do you grade the severity of ALI score? What are the criteria to label a patient in acute respiratory Distress status?
- 7) What are the various cutaneous manifestations of a patient in a)Septic shock
  - b)Anaphylactic shock
  - c)trauma induced hemorrhagic shock
- 8) Mention the steps in oxygen cascade. Define the shift of the ODC to the right. And mention the factors which shift the curve to the left side.
- 9) Write briefly the technique of pulmonary artery catheterization. Mention briefly the utility of thermodilution catheter. How do you confirm the tip of the catheter is in pulmonary artery?
- 10) Write briefly about capnography and its utility in emergency unit.

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PAPER-IV: Clinical radiology related to CNS, Orbits and recent advances in radiology and imaging and interventional radiology and nuclear medicine

TIME: 3 HOURS Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Digital Tomo synthesis and its role in the evaluation of breast lesions.
- 2) Role of diffusion weighted imaging in the diagnosis of intra cranial tumours.
- 3) What are the newer sequences used in MRI?
- 4) How do you manage a case of varicose veins by interventional radiology?
- 5) Describe the technique of CT enterography and its advantages over MR enterography.
- 6) Discuss PET-CT principles and clinical uses?
- 7) What is BIRADS-discuss Elastography principles and clinical uses?
- 8) What is Hunter triangle? Define Spectroscopy and discuss proton spectroscopy in CNS pathologies.
- 9) Contrast enhance MR imaging of the breast.
- 1( Captopril Scintigraphy.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 ANAESTHESIOLOGY

PAPER-IV: INTENSIVE CARE MEDICINE, PAIN MEDICINE AND RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- 1) Discuss the aims of establishing post anaesthesia care unit (PACU) and how patient safety ensured in PACU?
- 2) Compare the merits and demerits of regional blocks for pain relief in advanced cancer.
- 3) What is the present status of Autologous Blood Transfusion?
- 4) Describe the current methods available for control of pain in intensive care unit.
- 5) Write about video assisted devices in the management of airway in a patient with trauma.
- 6) Describe the recent Ventilatory strategies in the management of ARDS.
- 7) What are the methods of providing pain relief for paediatric patients undergoing Oro facial surgeries? What are the complications?
- 8) Discuss the role of Vasopressors and vasodilators in Anaesthesia.
- 9) Write about enteral nutrition. Mention the advantages over parenteral

nutrition.

 ${f 1C}$  Complications of Tracheostomy methods to prevent them.

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### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 ANATOMY

PAPER-IV: NEUROANATOMY AND EMBRYOLOGY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Development and anomalies of pituitary gland.
- 2) Nuclei and connections of Thalamus.
- 3) Corticospinal tract.
- 4) Development of Male Urethra. Add a note on anomalies.
- 5) Development of Kidney and anomalies.
- 6) Describe the Spinal Cord and its blood supply.
- 7) Draw and label section of Mid-brain at various levels.
- 8) Fetal Circulation and discuss the changes that take place after birth.
- 9) Endochondral ossification.
- 10 Imaging Techniques.

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### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 BIOCHEMISTRY

PAPER-IV: CLINICAL BIOCHEMISTRY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- 1) Describe the importance of point of care testing in Emergency Medicine giving suitable examples.
- 2) What are the components of Quality Control? Define and explain them.
- 3) Explain Polymerase Chain Reaction and its applications.
- 4) Principle and Applications of Electrophoresis.
- 5) Short Notes on:
  - a) Applications of Recombinant DNA Technology
  - b) Blood Buffers
- 6) Short Notes on:
  - a) Enzyme pattern in Myocardial Infarction
  - b) Insulin challenge test
- 7) What are the molecules that influence obesity and describe the metabolic changes in obesity?
- 8) Describe the chemical and viral carcinogens. What is the molecular basis for carcinogenesis?
- 9) What are the causes and biochemical changes in Metabolic Acidosis? Mention the laboratory investigations in Metabolic Acidosis.
- 10 Describe the gastric function tests. Add a note on Zollinger Ellison syndrome.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER,13 COMMUNITY MEDICINE

PAPER-IV: HEALTH ADMINISTRATION AND RELATED SUBJECTS

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- 1) Compare a manager with a leader. Why is leadership an important attribute in Public Health?
- Define strategy. List the methods, stages and tasks of developing a public health strategy.
- 3) How does Planning Programming Budgeting System (PPBS) help decision makers in priority setting in Public Health?
- 4) What is WHO definition of violence? Explain the Public Health approach to violence prevention.
- 5) Define evaluation. What is the purpose of evaluation? Add a note on the types and models of evaluations.
- 6) Explain the structure and function of the Public Health System of the United States.
- 7) Decentralized Health Care Delivery.
- 8) Discuss in brief the National AIDS control programme.
- 9) Silent features of Health survey and planning committee.
- 1( Discuss the major hurdles in health communication.

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MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS - DECEMBER, 2013 D.V.L.

PAPER-IV: DERMATOLOGY IN RELATION TO OTHER SYSTEMIC DISEASES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- Discuss clinical features, differential diagnosis and management of Macular amyloidosis.
- 2) Discuss pathogenesis of acrodermatitis Enteropathica.
- 3) Reconstructive surgery in leprosy.
- 4) Classify lasers. Discuss their use in dermatology.
- 5) Erythropoietic Protoporphyria (EPP).
- 6) PUVA Photochemotherapy.
- 7) Cutaneous manifestations of Dermatomyositis.
- 8) Write about skin changes in systemic sclerosis.
- 9) Write about nail changes in various diseases.

1( Write about stem cell usage in dermatology.

### MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 OTORHINOLARYNGOLOGY

# PAPER-IV: OPERATIVE SURGERY AND ALLIED CLINICAL SUBJECTS CONNECTED TO ENT

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Causes of Tracheal stenosis and reconstruction of Trachea.
- 2) Indications, surgical procedure of septorhinoplasty.
- Write in detail the indications, operative steps and postoperative follow up for Cochlear Implants.
- 4) Discuss about management of sleep apnoea syndrome.
- 5) Write in detail the indications and surgical procedure of submandibular gland excision.
- 6) CSF rhinorrhea surgical management
- 7) Discuss the management of post Cricoid Cancer.
- 8) Management of frontal sinus diseases with a note on Balloon Sinuplasty.
- 9) Describe various screening tests for deafness in a Neonate?
- 10) What is a Micro debrider? Describe its application in ENT surgeries?

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 FORENSIC MEDICINE

PAPER-IV: FORENSIC MEDICINE PROPER

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Medico legal aspects of clinical trials.
- 12.Importance of examination of injuries due to fire arm to determine the range of fire.
- 13. Sudden death cardiovascular diseases, discuss in medico legal aspects.
- 14. Analytical method used in toxicological examination.
- 15. Discuss about the toxicological agents with can cause the impotence.
- 16.Drug dependence.
- 17.Bite marks.
- 18. Disputed paternity and maternity.
- 19. Techniques of DNA typing.
- 20. Froth differential diagnosis in living and dead.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 GENERAL MEDICINE

PAPER-IV: Tropical medicine, genetics, infectious diseases nutrition, critical care medicine

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Give an overview of Regenerative Medicine with special reference to Cerebral Stroke.
- Describe the Gene Therapy in clinical medicine and its potential complications.
- 3) Discuss the infections in Diabetes Mellitus and their management.
- 4) Chronic fatigue syndrome.
- 5) Severe falciparum malaria.
- 6) Advances in Genomics and Proteomics
- 7) What is new in Surviving Sepsis Guidelines 2013?
- 8) Pathogenesis and management of septic shock.
- 9) Etiology and management of systemic fungal infections.
- 10 Recent advances in management of nosocomial infection.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 MICROBIOLOGY

PAPER-IV: APPLIED MICROBIOLOGY AND RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Give an account of vancomycin resistant Enterococci? Add a note on drug resistance in Enterococci.
- 2) Electron Microscopy. SEM its application in Microbiology?
- 3) Molecular technique application in laboratory diagnosis of infections?
- 4) Newer Vaccines.
- 5) Emerging parasitic infections.
- Describe the various methods to detect metallo beta lactamases in Pseudomonas aeruginosa.
- 7) Animal and human ethics involved in microbiological work.
- Define transgenic mice and discuss its role in study of Microbial Pathogenicity.
- Discuss the role of newer antibiotics in management of multi drug resistant ESKAPE bacteria.
- 1( Write an essay on pathogenesis and immunoprophylaxis of rota virus.

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# MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 OPHTHALMOLOGY

PAPER-IV: RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Describe in detail the recent trends in corneal grafting.
- 12.Discuss the physical principles of ultrasound, role of U.B.M. in Ophthalmology.
- 13. Merits and demerits of different types of Multifocal I.O.L's.
- 14. Recent advances in management of A.R.M.D.
- 15. The Role of O.C.T. in Anterior Segment of the Eye.
- 16.Describe the aetiological factors and management of Macular Hole.
- 17. Write about orbital Implants and Explants.
- 18. Recent advances in Management of Retinoblastoma.
- 19. Write about the pharmacological actions, merits and demerits of the recent Anti Glaucoma drugs.
- 20. Write about:
  - a) Surgical management of Presbyopia.
  - b) Pentacam and its uses in ophthalmology.

### MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 ORTHOPAEDICS

PAPER-IV: RECENT ADVANCES IN OPERATIVE SURGERY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Recent developments in orthopaedic implants.
- 2) Recent trends in wound management.
- 3) Prosthetic materials in Arthroplasty.
- 4) Osteoporotic Vertebral lesions in old age.
- 5) Radionuclide bone scanning
- 6) Post operative DVT: prevention, clinical features and treatment.
- 7) Role of PET Scan in orthopaedics.
- 8) Minimally invasive Spinal surgery.
- 9) Recent trends in the management of Rotator Cuff lesions in a young adult.
- 10 Rehabilitation protocol in a patient with traumatic quadriplegia.

### MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS -DECEMBER, 2013 OBSTETRICS & GYNAECOLOGY

PAPER-IV: MEDICINE AND SURGERY IN RELATION TO OBSTETRICS AND

**GYNAECOLOGY** 

TIME: 3 HOURS Max.

Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) How will you manage a case of intestinal obstruction (post operative)?
- 2) Discuss the diagnosis and management of peripartum cardiomyopathy.
- 3) Complications of laparoscopy surgeries.
- 4) Changes in the urinary system during pregnancy and complications and their management during pregnancy.
- 5) Asthma complicating pregnancy and its management.
- 6) Recent advances in assisted reproductive technologies?
- 7) Surgical management of Stage IA2 and stage II A Cancer cervix.
- 8) Pre implantation genetic diagnosis?
- 9) A well controlled gestational diabetic mother is in active labour. How will you monitor during labour?
- 10 Management of puerperal psychosis.

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### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 PAEDIATRICS

PAPER-IV: DISEASES OF INFANCY AND CHILDHOOD

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- Describe clinical features and types of mitochondrial hepatopathies add brief note on diseases that resemble Reys syndrome.
- 2) Enumerate various types and clinical manifestations of mitochondrial encephalo myopathies.
- Discuss about causes and management of acute flaccid paralysis in children.
- 4) Classify haemolytic anaemias. How do you evaluate a case of anaemia and mention recent advances in the management of sickle cell disease?
- 5) Discuss etiology, classification and management of acute lymphatic leukemia.
- 6) Advances in management of congestive heart failure.
- Describe the management of status epilepticus and discuss the role of newer antiepileptics in the management of epilepsy.
- 8) Patterns of Genetic Inheritance.

- Etiology, clinical features and management of congenital Hypothyroidism.
- 10) Discuss the recent guidelines of childhood tuberculosis treatment.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 PHARMACOLOGY

PAPER-IV: CLINICAL PHARMACOLOGY - THERAPEUTICS

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Recent advances in Management of Post menopausal Osteoporosis.
- 2) Recent advances in Treatment of Obesity.
- 3) Pharmaco economics its applications
- 4) GCP guidelines.
- 5) Novel methods of drug delivery.
- 6) Treatment of Insulin Resistance.
- 7) Monoclonal Antibodies and their applications.
- 8) Treatment of Chloroquine resistant malaria.
- 9) Composition and functions of Ethical committee.
- 10 Interferons.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 PATHOLOGY

# PAPER-IV: RECENT ADVANCES IN PATHOLOGY RELATED TO CLINICAL MEDICINE

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss in detail the recent trends in the diagnosis, differential diagnosis and grading of malignant ovarian tumours.
- 2) Classify gallstones with their characteristics. Discuss the current concepts in the formation of gallstones.
- 3) New concepts in the diagnosis of MALT lymphoma.
- 4) Role of Autologous Stem Cell Transplantation in Hematological Malignancies.
- 5) Role of microwave in histopathology.
- 6) Molecular pathology of small round cell tumours.
- 7) Recent advances in pathology of urothelial neoplasms.
- 8) Genetic basis of essential hypertension.
- 9) Recent concepts in cancer invasion and metastasis.
- 10 Bio medical waste management.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 PHYSIOLOGY

PAPER-IV: APPLIED PHYSIOLOGY

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Name neuro muscular blockers and their significance.
- 12. How do you medically induce Hypothermia? Explain its medical uses.
- 13. Explain difference between regular astigmatism and irregular type.
- 14.Tread-mill test and its significance.
- 15. Physiological basis of usage of various types of oral contraceptives.
- 16.DNA finger printing.
- 17.Oedema safety factor.
- 18. Stem cell therapy.
- 19. Acid peptic disease.
- 20. What is normal prothrombin time? Explain the procedure and significance.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 PSYCHIATRY

PAPER-IV: PSYCHIATRIC SPECIALITIES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Anxiety in Medical Conditions.
- 2) Psychiatric aspects of Irritable Bowel Syndrome.
- 3) Palliative care psychosocial aspects.
- 4) Vitamin deficiencies and Psychiatry.
- 5) Aetiological factors in Mental retardation.
- 6) Principles of psychopharmacological treatment in geriatric mental disorders.
- 7) Discuss the current understanding of postpartum psychiatric disorders.
- 8) Differential diagnosis of Tic disorders.
- 9) Testamentary capacity.
- 1( Marriage and divorce in the mentally ill.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 PULMONARY MEDICINE

PAPER-IV: Epidemiology of tuberculosis and prevention, recent advances in tuberculosis

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Newer drugs in COPD.
- 2) Gene therapy in respiratory diseases.
- 3) Discuss the current epidemiological status of Tuberculosis in India.
- 4) Interferon Gama Release Assay (IGRA) for Tuberculosis.
- 5) Capnometry definition and clinical utility.
- 6) Virtual bronchoscopy and endobronchial ultra sound.
- 7) Discuss Health care associated pneumonia and approach to management.
- Biomarkers to optimize antibiotic therapy for pneumonia due to multidrug resistant pathogenesis.
- 9) Indications and contraindications of Lung transplantation.
- 10 Nocturnal long terms Oxygen therapy.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS -DECEMBER, 2013 RADIOTHERAPY

PAPER-IV: Clinical subjects in relation to radiotherapy, recent advances in radiotherapy & oncology

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss the various methods of Immobilization devices in Radiotherapy.
- 2) Cyber knife.
- 3) Targeted therapy.
- 4) Role of Tumor Markers in Oncology.
- 5) PET CT role in Oncology.
- 6) Intraoperative Radiotherapy.
- 7) What is OAR? Discuss the tolerance doses for OAR's in Head and Neck Cancers.
- 8) Role of Survival Curves in Cancer Statistics.
- 9) Tumor Lysis Syndrome.
- 10 Para neoplastic syndrome.

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### MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2013 GENERAL SURGERY

PAPER-IV: GENERAL SURGERY, OPERATIVE SURGERY INCLUDING RECENT ADVANCES

TIME: 3 HOURS

Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Recent advances in the management of BPH.
- 2) Current surgical management of urolithiasis.
- 3) Recent advances in management of burns.
- 4) Preoperative medical work-up and the surgical management of pheochromocytoma.
- 5) Discuss recent advances in management of Carcinoma breast in detail.
- 6) Write elaborately the role of Radionuclide in General Surgery.
- 7) Write about Robotic Surgery.
- 8) Discuss the management of Carcinoma oesophagus with special reference to operative procedures.
- Principles of metabolic surgery and various operative procedures adopted.
- 1( Discuss about tumour markers.

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2013 HOSPITAL ADMINISTRATION

PAPER-IV: Administration of clinical and Non-Clinical Services and Administrative procedures

TIME: 3 HOURS Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

- Planning and organization of Medico-social worker (MSW) services for a teaching hospital.
- Quality Control Aspects of C.S.S.D. including the Design Considerations.
- 3) Waiting line problems in OPD.
- 4) Mob Fury in Hospitals.
- 5) Discuss the Administrative Issues and Monitoring the Health Insurance Schemes in Tertiary care Hospital.
- 6) Sewage Treatment Plant (STP) Design and operational Issues –

  Mention the Statutory Records to be maintained and submitted to

  Pollution Control Board.
- 7) Marketing of Hospital Services.
- 8) Energy Conservation Measures in the Hospital: Electric Power and Water.

- 9) Dietary Services in a Medical College Hospital.
- 10) Organization of Housekeeping services in a hospital.

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### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013

### GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 3. Describe the Microbial pathogens causing Cavitary Lung Infections
- 2. Causes of Hypokalemia
- 3. Sex hormones and andropause
- 4. Hirsutism
- 5. Renin angiotensin system
- 6. Newer insulins
- 7. Approach to a patient with Anemia
- 8. Discuss the pathogenesis of upper motor neurone weakness, lower motor neurone weakness and myopathic weakness
- Discuss the Anatomy and Physiology of Gait and Balance disorders
- 10. Newly emerging risk factors for CAD

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013

### OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 74. Lymphatic drainage of vulva
- 75. Endo pelvic fascia
- 76. Discuss the endocrinology of menstruation
- 77. Perinatal infection
- 78. Tests for ovulation
- 79. Physiology of uterine action
- 80. Factors influencing maternal mortality rate in India.
- 81. H.P.O axis in Gynecology
- 82. Pap smear and its importance
- 10. Drugs for acute hypertension in pregnancy.

### M.D. DEGREE INTERNAL EXAMINATION - JUNE, 2013

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

- 73. Laboratory diagnosis of paediatric HIV infection
- 74. Cerebrospinal fluid analysis
- 75. Vitamin D metabolism and its role in paediatric diseases
- 76. Discuss the mechanism of production of free radicals and discuss the disorders produced due to free radicals in Neonates
- 77. Discuss about pancreatic function tests in pediatric practice.
- 78. Pathogenesis of cerebral edema.
- 79. Third generation cephalosporins
- 80. Biochemical changes in Hypoxic ischemic encephalopathy
- 81. Causes and Pathophysiology of acidosis
- 10. Third generation cephalosporins

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 75. Write about carbon dioxide transport in blood.
- 76. Calcium channel blockers and their relevance in anaesthesia.
- 77. Factors influencing uptake and distribution of volatile anaesthetic agents in anaesthesia.
- 78. Define and classify vaporizers. What are the physical principles involved in the process of vaporization?
- 79. Write about capnography and its abnormal tracings?
- 80. Describe coronary circulation and various factors that alter the blood flow in the coronary circulation.
- 81. Discuss the physiological changes during pregnancy and its relevance to anesthesiologists.
- 82. Describe the manufacture of Nitrous Oxide and purification of impurities of Nitrous Oxide.
- 83. Write the Anaesthetic implications of magnesium.
- 10. Write briefly on monitoring coagulation in the perioperative period.

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 76. Discuss the role of biological markers in Neoplasia
- 77. Immunopathogenesis of HIV infection
- 78. Familiar Hypercholesterolemia
- 79. Pathologic calcification
- 80. Endothelial cells in health and disease
- 81. Mention causes of cellular injury. Describe in detail the sequence of events in ischemic and hypoxic injury to cells.
- 82. Describe chemokines and their role in inflammation
- 83. Discuss in detail pathogenesis and pathology of shock
- 84. Implications of Genomic imprinting in human disease.
- Classify rejection reactions and describe pathology of acute rejection.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 RADIO DIAGNOSIS

Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 66. Describe the basic principles and clinical applications of MDCT. How does it defer from conventional 1<sup>st</sup> generation CT?
- 67. Enumerate the various hazards of radiation and detail various methods for radiation protection with mention of recommended permissible dose limits
- 68. Discuss the radiological features of Osteoarthritis
- 69. Describe basic principles of CT scan and discuss various generations of CT scans
- 70. Discuss deductive echocardiography and various echocardiographic views
- 71. Discuss the various adverse reactions to contrast media and their management
- 72. Describe the recent developments in X ray film processing
- 73. What are the different methods of reduction of radiation exposure
- 74. Draw and label the radiological anatomy of mediastinum. Discuss in detail radiological examination of posterior mediastinum lesions.
- 10. Write short notes on
  - a) Maximum permissible dose
  - b) Bronchopulmonary segments
  - c) MRI Artifacts
  - d) PACS in radiology
  - e) Flat panel detector

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013

PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Development of the lung and its anomalies
- 74. Development of the diaphragm and mention its anomalies
- 75. Describe normal spirometry and mention some (anomalies) abnormal spirometries
- 76. Control of respiration
- 77. Non-respiratory functions of the lung
- 78. Aorto pulmonary window.
- 79. Role of lung in maintenance of acid base balance
- 80. Closing volume
- 81. Phosphodiesterase inhibitors in respiratory medicine
- 10. Medical thoracoscopy.

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Describe the methods of sterilization commonly used. Add a note on recent advances in air filtration.
- 74. Noble Laureates in Microbiology
- 75. Define Hypersensitivity. Write in detail about anaphylaxis and its applications. Add a note on experimental animal used to demonstrate anaphylaxis.
- 76. Define CMI. What are the cells involved in CMI. What are the methods to detect CMI in vitro. Add a note on how to rise CMI in man.
- 77. Describe plasmids and various functions conferred by plasmids.
- 78. Write an essay on Electron microscope.
- 79. Describe alternative and lectin pathways of activation of complement. Enumerate the biological effects of complement.
- 80. Name primary immunodeficiency diseases. Describe DiGeorge's syndrome.
- 81. Explain Hybridoma technology and give its applications in Microbiology
- 10. Write in detail about autoimmunity

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. What is Social Medicine? Explain Social control of medicine.
- 74. Write in detail about concept of well being / mention four indicators of well being..
- 75. Social aspects of excreta disposal in India.
- 76. Discuss health care revolution.
- 77. Define health economics. Role of National Government to Improve Health care.
- 78. Briefly describe the additional criteria for judging causality
- 79. Discuss the role of primordial prevention in control of Non-communicable diseases.
- 80. Discuss the concept of standard error in health research
- 81. Discuss the role of Eugenics & Euthenics in control of genetic diseases
- 10. Give an account of changing concepts in Public Health

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Cognitive and neuropsychological assessment
- 74. Neuro developmental basis of psychiatric disorders
- 75. Neuro imaging techniques in Psychiatry
- 76. Adult Neurogenesis
- 77. Psychiatric rating scales
- 78. Tests for measuring intelligence
- 79. Discuss in detail about Basal Ganglion and their functions
- 80. Explain Glutaminergic system its role in Psychiatry
- 81. Genetics in Schizophrenia
- 10. Voltage gated Ion channel

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Enumerate the techniques by which proteins are purified
- 74. Describe the applications of radio isotopes in the study of metabolic pathways. How R.A measured?
- 75. Describe the structures and properties of phospholipids with suitable examples. Add a note on their functions
- 76. Write short notes on:
  - a) Hendersen Hasselbach equation
  - b) X-ray crystallography
- 77. Write short notes on:
  - a) Ultra centrifugation
  - b) Osmolality and Osmolarity
- 78. Colloids and their properties
- 79. Explain the various techniques used to separate and purify bio molecules
- 80. Subcellular fractionation
- 81. Transfer of material and information across membranes.
- 10. Dissaccharides of physiological importance

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Define Pharmacodynamics, write about receptor mechanisms of drug action. Add a note on second messengers
- 74. Structure activity relationship of catecholamines
- 75. ANOVA
- 76. Composition and functions of human ethics committee and add a note on alternatives to 6 animal experiments
- 77. Give principles of Bioassay. Add a note on four point assay.
- 78. Describe the techniques of experimental evaluation of a drug for analgesic activity.
- 79. Students `T' test
- 80. High pressure liquid chromatography
- 81. Kinetics of drug elimination
- 10. Tolerance

#### FORENSIC MEDICINE

Paper-I : Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Radiological identification of victims of mass disaster
- 74. Myocardial infarction complications and autopsy findings.
- 75. Describe the procedure of periapical and bite wing ante mortem and postmortem radiographs of jaw for fixing identity
- 76. Describe the clinical and pathological picture of acute renal failure with a special note on crush syndrome.
- 77. Deaths in relation with hospital care and nosocomial infections
- 78. Legal implications of AIDS
- 79. Human skull and its medico legal importance.
- 80. Determination of age by human upper limbs by ossification centers.
- 81. Skeletonized body exhumed from grave with suspicion of foul play. How will you establish the identity, cause, manner and time of death?
- 10. Discuss role of forensic pathologist in mass disaster.

### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Cell adhesion molecules
- 74. Na+ K+ ATP
- 75. Physiology of ageing
- 76. Physiology of contraction of smooth muscle.
- 77. Classification of neurons
- 78. Patch clamp technique
- 79. Measurement of body fluid
- 80. Channelopathies
- 81. Abnormal Haemoglobin
- 10. Fatigue

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 RADIOTHERAPY

PAPER-I: BASIC SCIENCES, RADIATION PHYSICS

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Discuss quality assurance in Radiotherapy.
- 38. Discuss the relevance of Time Dose Fractionation in Radiotherapy
- 39.ICRU 62.
- 40. Radio Sensitizers and Radio modifiers.
- 41. Cell cycle and its importance
- 42. Planning and installation of Telecobalt unit
- 43. Discuss the lymphatic drainage of breast and latest TNM staging of breast cancer
- 44. Principles of simulation in Radiotherapy.
- 45. Discuss the role Hyperthermia and its clinical applications
- 10. Pathology of Bone tumors

# M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 65. Anatomy and anomalies of extra hepatic biliary system
- 66. Describe segmental Anatomy of Liver and different hepatic reactions
- 67. Describe micturition reflex and formation of calculi
- 68. Immunotherapy
- 69. Pathogenesis of DVT and DVT prophylaxis
- 70. Prophylactic antibiotics in Surgery
- 71. Life cycle of Echinococcus granulosus and its surgical importance
- 72. Supports and ligaments of rectum and anal canal and factors that maintain continence.
- 73. Describe the embryological development and descent of testis. Add a note on surgical importance of undescended testis and its complications.
- 10. Describe the circle of Willis and discuss briefly on etiopathogenesis of intracranial tension

### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81. Bone graft and substitutes
- 82. Frozen shoulder
- 83. Blood supply of femoral head
- 84. Narrate the surgical importance of the arches of foot
- 85. Write an essay on hospital infections and its management
- 86. Write short notes on:
  - a) Russell's traction
  - b) Perkins Traction
- 87. Tendon transfers general principles
- 88. Electrodiagnosis
- 89. Trendelenburg test
- 10. Types of Nerve injury and neuro diagnostic studies.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 76. Enumerate ocular viruses and lesions caused by them.
- 77. Discuss corneal transparency. What is posterior lamellar Kerato plasty?
- 78. Viral Keratitis.
- 79. Intra vitreal injections
- 80. Ultrasonography in Ophthalmology
- 81. Describe anatomy of angle of anterior chamber also various methods to assess the angle.
- 82. What factors responsible for maintenance of corneal transparency?
- 83. Describe the histo pathology of Retino blastoma
- 84. What are mydriatics and cycloplegics and their uses in Ophthalmology?
- 10. Draw the diagram of strums conoid and its applications.

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# M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013

# OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 68. Describe the anatomy of organ of corti.
- 69. Discuss role of imaging in otolaryngology.
- 70. Describe surgical anatomy of cervical lymph glands
- 71. Write about the endoscopic anatomy of osteomeatal complex.
- 72. Describe about the various theories of hearing.
- 73. What is Biofilm, What is their role in development of bacterial resistance to antibiotics? Comment on their ways of management.
- 74. What are tumor markers, mention their role in ENT practice?
- 75. What is cell cycle? Mention the role of Chemotherapeutic agents cell cycle.
- 76. What is the auditory pathway? Mention about the role of BERA in localizing various lesions in auditory pathway.
- 10. Preoperative preparations before major head and neck surgery.

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Describe the development of ovary and abnormalities
- 74. Describe the fascial spaces of the hand. Indicate the principles applicable to all incisions in hand.
- 75. Describe the anatomy of visual pathways and visual cortex. Mention the localizing signs for lesions of visual pathway.
- 76. Clinical importance of venous drainage of lower limb / venous perforators.
- 77. Describe the surgical anatomy of scrotum
- 78. Boundaries of middle ear
- 79. Deep cervical fascia
- 80. Subdiaphragmatic spaces
- 81. Achalasia Cardia and its clinical importance
- 10.Lymphatic drainage and applied Anatomy of mammary gland

### D.V.L.

# Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Discuss on functions and contents of sebum
- 74. Structure and functions of eccrine gland
- 75. Role of streptococcus in dermatology.
- 76. Explain the importance of urine examination in STDs.
- 77. Write in detail about dapsone and its role in leprosy
- 78. Classify eczemas. Discuss the current concepts of pathogenesis and management of atopic dermatitis.
- 79. Briefly write about role of innate immunity and about any one soluble factor
- 80. Enumerate basic pathological units of skin and write about any one.
- 81. Odland bodies
- 10. Anatomy of a sweat gland and pathophysiology of sweating.

#### HOSPITAL ADMINISTRATION

# Paper-I – GENERAL ADMINISTRATION AND MANAGEMEMNT IN HOSPITAL FIELD

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Planning as a tool for hospital management
- 29. Matrix organization Hospital as an example
- 30. Various "Decision Making" techniques for a hospital.
- 31. Situational leadership in hospital with examples
- 32. Role of hospital administrator.
- 33. Equity theory for motivation
- 34. Economic order quantity
- 35. Decision tree analysis
- 36. Barriers to communication
- 10. Break even analysis

#### TRANSFUSION MEDICINE

Paper-I – Basic Sciences in Applied Immunohematology and Blood Transfusion.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Human immunoglobulins and their role in transfusion medicine
- 2. Discuss the immunology related to transfusion medicine
- 3. Pathophysiology of DIC.
- 4. Hematopoietic Stem Cell
- 5. Role of HLA in transfusion medicine
- 6. Mechanisms of drug induced AIHA
- 7. Types of ELISA and principles
- 8. Draw complement pathway
- 9. Mixed lymphocyte culture test
- 10. Describe biosynthesis of ABO blood group antigens

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2013

# EMERGENCY MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Causes of Acute respiratory failure
- 2. Mechanism of metabolic response to trauma
- 3. Pathophysiology of heart failure
- 4. Brachial plexus
- 5. Neuro muscular blocking agents
- 6. Anaphylaxis
- 7. Oxygen toxicity
- 8. Describe the importance of creatinine clearance
- 9.ECG changes in hyperkalemia
- 10. Parameters for cardiac performance during mechanical ventilation

#### **GENERAL MEDICINE**

Paper-III – Principles and Practice of Medicine including Theropeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Cluster headache
- 65. Management of hepatic encephalopathy
- 66. Discuss the various syndromes due to heat exposure
- 67. Advances in the management of heart failure
- 68. Pyogenic meningitis
- 69. Approach to a patient with proteinuria
- 70. Transfusion transmitted diseases
- 71. Discuss the hypoglycemia in Diabetes Mellitus
- 72. Classify Portal Hypertension and discuss about Budd-Chiari syndrome.
- 10. Anxiolytic drugs

# OBSTETRICS & GYNAECOLOGY Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Diagnostic criteria for post molar gestational trophoblastic neoplasia (FIGO)
- 65. Non Hormonal contraceptive methods.
- 66. Testicular feminization syndrome.
- 67. Treatment modalities of carcinoma cervix
- 68. Trans cervical sterilization
- 69. Non-Scalpel vasectomy
- 70. Write the etiology, classification and diagnosis of V.V.F
- 71. Management of Nulliparous prolapse uterus
- 72. Discuss complete perineal tear
- 10. Discuss contraception in male

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Complementary feeding
- 65. Microminerals in growth and nutrition
- 66. Classify dengue illness and outline management of severe dengue illness
- 67. Nutritional requirements of infants aged 1- 12 months
- 68. Discuss the immunological basis for Pediatric Vaccination; enumerate newer vaccines and their schedule.
- 69. Discuss the etiology clinical features complications and management of epidemic parotitis
- 70. Describe the life cycle of malaria parasite in human beings and management of complicated malaria.
- 71. Elaborate on bioactive factors in human milk.
- 72. Etiology pathogenesis, lab diagnosis of DIC.
  - 10. Differential diagnosis of acute flaccid paralysis in infants (AFP).

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. Discuss the anaesthetic management of a 30 year old female patient with severe post burn contracture neck posted for release of neck contracture.
- 68.A 60 year old female weighing 100kg is posted for an open cholecystectomy for a cholelithiasis. Write about preoperative preparation and anaesthetic management.
- 69.A 70 year old male weighing 60kg with history of hypertension and BPH is posted for a TURP procedure. Discuss the evaluation, preoperative preparation, anaesthetic management and the possible complications.
- 70. A 50 year old female weighing 40kg is posted for a thymectomy for myasthenia gravis. Discuss your preparation, anaesthetic management and postop care.
- 71. Anaesthetic management of a patient with subdural hematoma with increased intracranial tension for emergency decompression craniotomy.
- 72. Write briefly about the problem of anaesthetic management for trachea oesophageal fistula repair in a neonate of 24 hours age.
- 73. A sixty old patient with COPD for TURP, discuss evaluation and anaesthetic management.
- 74. Anaesthetic considerations for a patient with psychiatric disorders.
- 75. Discuss the anaesthetic management for LeFort II fracture surgery
- 10. Describe complex Regional Pain Syndrome (CRPS), common types and write down the possible ways to reduce pain in CRPS

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M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and

# Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. Discuss the correct concepts of Myelodysplastic syndrome.
- 68. FNAC of mediastinal masses.
- 69. Use of blood components.
- 70. Synovial fluid examination
- 71. Laboratory diagnosis of coagulation disorders
- 72. Discuss classification and lab diagnosis of hemolytic anemias
- 73. Describe the role of serological tests in diagnosis of various malignancies
- 74. Describe the recent concepts of automation of cervical cytology
- 75. How do you ensure safety of donors and patients during processing and storage of blood components?
- How do you organize quality control in a surgical pathological
   lab

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# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radiodiagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Describe the segmental anatomy of the liver. Write in detail about imaging in Budd-Chiari syndrome
- 58. Discuss imaging in developmental dysplasia of hip.
- 59. Discuss the role of interventional Radiology in management of uterine fibroids
- 60. How do you investigate a case of pulmonary thrombosis and give various radiological findings.
- 61. How do you investigate a case of Hemoptysis and discuss various imaging findings.
- 62. Discuss the role of MRI in shoulder injuries
- 63. Enumerate various sellar and parasellar mask lesions. Discuss their radiological features.
- 64. Describe the imaging signs of acute hemorrhagic infarction.
- 65. Differential diagnosis of orbital lesions
- 10. Explain in detail neural tube defects. Mention image findings.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. Pancreatic pleural effusion mechanism, diagnosis and its management.
- 68. Define corpulmonale, mention the causes and its management
- 69. Pulmonary Thrombo-embolism
- 70. Write the WHO and TNM Classification
- 71. Inflammatory mediators in asthma
- 72. Pulmonary hypertension classification, symptoms and management
- 73. Hypoxemic Respiratory failure
- 74. How you investigate for staging a case of Bronchogenic carcinoma
- 75. Recurrent Pneumonia
- 10. Shaver's disease

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 65. Enumerate viruses causing hepatitis. Write in detail about pathogenesis, laboratory diagnosis and all viral markers of Hepatitis B. Add a note on its complications and prophylaxis.
- 66. Microfilaria.
- 67. Mycetoma
- 68. Describe the pathogenesis and lab diagnosis of cytomegalovirus
- 69. Enumerate the fungi causing opportunistic infections. Describe the pathogenesis and lab diagnosis of Zygomycosis.
- 70. Describe the pathogenesis and lab diagnosis of Cytomegalovirus.
- 71. Classify tissue nematode. Describe the pathogenesis and lab diagnosis of lymphatic filariasis.
- 72. Describe the pathogenesis and lab diagnosis of schistosomiasis
- 73. What are interferons? Explain their mechanism and clinical applications.
- 10. Describe Naegleria fowleri.

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M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 SOCIAL & PREVENTIVE MEDICINE Paper-III: Maternal and Child health, Family Planning,

# Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. National Nutritional Policy. Name a few community Nutrition programmes.
- 65. Health problems due to industrialization
- 66. Role of Public Private partnership in Family Welfare Programme
- 67. Recent trends in mother and child healthcare. Note on Indicators of MCH care.
- 68. Surveillance of drinking water quality and mention ICMR standards of water quality.
- 69. Discuss the role of Indian Factories Act in safeguarding the health and welfare of workers
- 70. Discuss briefly the control measures against global warming
- 71. Discuss the steps of evaluation of Family planning in a district
- 72. Discuss the challenges in public health in the field of geriatrics
- 10. Discuss the control measures for noise pollution in India.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Psychotropics in pregnancy and Lactation
- 65. Neurobiology of Bipolar disorder
- 66. Management of treatment resistant depression
- 67. Erective dysfunction
- 68. Psychiatric and medical complications of morphine abuse
- 69. Psychological disturbances in mentally handicapped children
- 70. Panic attacks
- 71. Somatoform disorders
- 72. Management of schizophrenia
- 10. Rapid tranquilization

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 BIOCHEMISTRY

# Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Write short notes on:
  - a)Mucosal block theory
  - b)Biological value of proteins
- 65. Functional tests of adrenal cortex
- 66. Synthesis and functions of thyroid hormones
- 67. Mechanism of action of steroid hormones.
- 68. Role of selenium in the body
- 69. What is balance diet? How do you prepare a diet for a normal young adult male of sedentary habits?
- 70. Sources and utilization of one carbon moiety.
- 71. Role of copper in health and disease
- 72. Chemiluminescence in clinical diagnosis.
- 10. Define metabolic syndrome. How is it detected? Explain etiology, management, hormonal disturbances associated with Insulin resistance.

# M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Treatment of infertility
- 74. Streptogramins and treatment of MRSA infections
- 75. Enumerate about anti platelet drugs used in the disorders of coagulation
- 76. Discuss the current status of pharmacotherapy of chloroquine resistant falciparum malaria and add a note on malaria prophylaxis.
- 77. Incretins in therapy of Type II diabetes
- 78. Protease inhibitors
- 79. Insulin analogues
- 80. Biological response modifiers
- 81. Selective estrogen receptor modulators (SERM)
- 10. Androgen receptor antagonists

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 FORENSIC MEDICINE

# Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Discuss the injuries caused to the neck structures from compression of neck
- 65. Diagnosis of poisoning in living and dead
- 66. Discuss the complications of chronic alcoholism and add a note on deaddiction therapy of alcoholism.
- 67. Write about environmental and industrial toxicology.
- 68. Body packers.
- 69. Pathological picture of Myocardial infarction
- 70. Brain death, human organs transplantation act 1994
- 71. Discuss Opium poison and its medico legal importance
- 72. Surrogate motherhood and medicolegal problems associated with the procedure.
- 10. A dead body female unknown aged about 18 years found in open field, rigormortis present all over body. No visible external injuries. Discuss role of forensic expert.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Micro gravity
- 74. Structure and functional relationship of the vascular system
- 75. Syndromic and nonsyndromic deafness
- 76. Vectorcardiogram
- 77. Sherringtonian rigidity.
- 78. Define Starling's law of heart and its application in health and diseased condition
- 79. Explain the mechanisms that prevent collapse of lungs
- 80. Describe the role of cerebellum in regulation of coordinated voluntary activity and list the clinical features of cerebellar lesion
- 81. Phototransduction.
- 10. Describe the mechanism of coding of intensity and frequency of sound by the Internal ear..

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 RADIOTHERAPY

Paper-III: Gynecological Malignancies, GI Malignancies, Hepatobiliary, Uro Genital, Bone Tumours, Soft issues Skin and Appendages, Benign Tumours

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Classify Bone Tumors and discuss the management of Ewing's Sarcoma
- 20. Neo adjuvant treatment in Ca. Rectum
- 21. Role of Radiotherapy in Endometrial Carcinoma
- 22. Role of Chemo radiation in Ca. Bladder
- 23. Classify testicular tumors and discuss the management of seminoma.
- 24. Radiation proctitis and its management
- 25. Classify malignant tumors of skin and discuss the management of Basal Cell Carcinoma
- 26. Invasin Thymoma
- 27. Second primary malignant tumors
- 10. Discuss the management of Prostate carcinoma

# M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

74. ANDI

- 75. Write briefly precancerous conditions of tongue and management of carcinoma tongue.
- 76. Discuss mediastinal tumours
- 77. Pott's spine
- 78. Describe clinical features, investigations and management of putty kidney
- 79. Discuss carcinoma of oesophageus
- 80. Discuss post operative pulmonary complications
- 81. Pathophysiology of venous ulcers. Discuss their management.
- 82. Describe briefly the clinical features and management of `Strangulated Femoral Hernia'
- 10. Discuss rupture of spleen

#### **ORTHOPAEDICS**

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Describe gait cycle and enumerate abnormal gait patterns
- 65. Discuss the etiopathology and management of tuberculosis of the dorsal spine. Management of paraplegia of sudden onset.
- 66. Discuss Pathology, Clinical features, Radiological features of osteosarcoma and management of osteosarcoma lower end of femur in a boy aged 15 years.
- 67. Write short notes on:
  - a) Madelung's deformity
  - b) Sudeck's osteodystrophy
- 68. Write short notes on:
  - a) Caudaequina syndrome
  - b) Dupuytren's contracture
- 69. Discuss the sequelae of post polio residual paralysis and various contractures and management
- 70. Narrate the coaxvara group of diseases. Describe in detail slipped capital femoral epiphysis symptoms, management, complications
- 71. Congenital vertical talus
- 72. Osteotomies around pelvis.
- 10. Lumbar canal stenosis

# M.S. DEGREE INTERNAL EXAMINATION –JUNE, 2013 OPHTHALMOLOGY

Paper-III : Conjunctiva, cornea sclera, lens, glaucoma, uvea, retina, vitreous, squint.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. Discuss dry eye.
- 68. Early diagnosis of primary open Angle Glaucoma and Surgical management.
- 69. Discuss non surgical treatment of squint
- 70. Principles of ophthalmic plastic surgery. Discuss surgical corrections of Entropion
- 71. How would you proceed to manage gradual fall of vision in elderly persons aged 65 years.
- 72. Classify Uveitis and its management
- 73. WHO classification of Vitamin A deficiency and Ocular manifestations
- 74. Discuss effects of closed globe injury.
- 75. What are the difference types of retinal detachment and their management

10. What is NPCB and its functions?

#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Discuss clinical assessment of a deaf child
- 65. Discuss clinical features, investigations and management of Atrophic Rhinitis
- 66. Discuss clinical features and management of malignant lesions of maxilla.
- 67. Differential diagnosis and investigations for hoarseness of voice.
- 68. Discuss differential diagnosis and management of space occupying lesions of parapharyngeal space.
- 69. How do you manage in rehabilitation of post laryngectomy individual? Mention about various techniques available in voice rehabilitation?
- 70. What is submucus fibrosis (progressive oral fibrosis)? What ae the various manifestations? Write about various modalities of management.
- 71. Mention about various Neck incisions and comment on merits and demerits of each in the management of Head and Neck Malignancies.
- 72. What is thyroplasty? Mention about various types and their role in management of various laryngeal disorders.
- 10. What is induction chemotherapy, concurrent chemotherapy?

  Mention about monoclonal antibodies and their role in medical oncology.

#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Histology of cartilages
- 65. Stem cells
- 66. Polymerase chain reaction (PCR).
- 67. Procedure to be followed in embalming for international transportation of cadaver.
- 68. Plastination technique
- 69. Histology of testis
- 70. Epithelium of urinary tract
- 71. Celloidin embedding.
- 72. X-linked inheritance
- 10. Staining techniques of nervous tissue.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Discuss clinical features, differential diagnosis, complications and management of sec. syphilis in pregnant woman.
- 74. Classify anti retroviral drugs, their doses and toxicity. How to initiate and follow up of patients on ART medication.
- 75. DD for inguinal bubo.
- 76. Dysuria. Explain in detail the diagnosis investigations and management of dysuria
- 77. Trophic leprosy.
- 78. Ocular changes in leprosy.
- 79. Management of HIV infection in pregnancy
- 80. Bridge population.
- 81. Manifestations of early congenital syphilis.
- 10. Animal models in leprosy

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 HOSPITAL ADMINISTRATION

### Paper-III— Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 37. Macro-level planing of a hospital.
- 38. Hospital space module
- 39. Planning considerations of emergency department
- 40. Hospital planning team
- 41. Vertical and horizontal tractions in a hospital.
- 42. Nurse patient relation
- 43. Medical insurance
- 44. Disaster management during floods
- 45. Consumer relations management
- 10. Risk management in hospitals

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2013

# EMERGENCY MEDICINE Paper-III – Recent Advances in Critical Care

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Complications during dialysis
- 2. Effects of Lactic acidosis in critical illness
- 3. Clinical features, diagnosis and management of DIC
- 4. Importance of End tidal CO2 monitoring during CPR
- Clinical effects and management of hypomagnesaemia in critically ill patients
- 6. Brief notes on adverse consequences of blood transfusion
- 7. Explain diagnostic criteria for UTI in catheterized patients
- 8. Hemodynamic patterns and management in scorpion sting envenomation
- 9. Propofol infusion syndrome in critically ill patients
- 10. Apnea test

# GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 4. Describe the Microbial pathogens causing Cavitary Lung Infections
- 2. Causes of Hypokalemia
- 3. Sex hormones and andropause
- 4. Hirsutism
- 5. Renin angiotensin system
- 6. Newer insulins
- 7. Approach to a patient with Anemia
- 8. Discuss the pathogenesis of upper motor neurone weakness, lower motor neurone weakness and myopathic weakness
- Discuss the Anatomy and Physiology of Gait and Balance disorders
- 10. Newly emerging risk factors for CAD

## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 83. Lymphatic drainage of vulva
- 84. Endo pelvic fascia
- 85. Discuss the endocrinology of menstruation
- 86. Perinatal infection
- 87. Tests for ovulation
- 88. Physiology of uterine action
- 89. Factors influencing maternal mortality rate in India.
- 90. H.P.O axis in Gynecology
- 91. Pap smear and its importance
- 10. Drugs for acute hypertension in pregnancy.

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Laboratory diagnosis of paediatric HIV infection
- 83. Cerebrospinal fluid analysis
- 84. Vitamin D metabolism and its role in paediatric diseases
- 85. Discuss the mechanism of production of free radicals and discuss the disorders produced due to free radicals in Neonates
- 86. Discuss about pancreatic function tests in pediatric practice.
- 87. Pathogenesis of cerebral edema.
- 88. Third generation cephalosporins
- 89. Biochemical changes in Hypoxic ischemic encephalopathy
- 90. Causes and Pathophysiology of acidosis
- 10. Third generation cephalosporins

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 84. Write about carbon dioxide transport in blood.
- 85. Calcium channel blockers and their relevance in anaesthesia.
- 86. Factors influencing uptake and distribution of volatile anaesthetic agents in anaesthesia.
- 87. Define and classify vaporizers. What are the physical principles involved in the process of vaporization?
- 88. Write about capnography and its abnormal tracings?
- 89. Describe coronary circulation and various factors that alter the blood flow in the coronary circulation.
- 90. Discuss the physiological changes during pregnancy and its relevance to anesthesiologists.
- 91. Describe the manufacture of Nitrous Oxide and purification of impurities of Nitrous Oxide.
- 92. Write the Anaesthetic implications of magnesium.
- 10.Write briefly on monitoring coagulation in the perioperative period.

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 85. Discuss the role of biological markers in Neoplasia
- 86. Immunopathogenesis of HIV infection
- 87. Familiar Hypercholesterolemia
- 88. Pathologic calcification
- 89. Endothelial cells in health and disease
- 90. Mention causes of cellular injury. Describe in detail the sequence of events in ischemic and hypoxic injury to cells.
- 91. Describe chemokines and their role in inflammation
- 92. Discuss in detail pathogenesis and pathology of shock
- 93. Implications of Genomic imprinting in human disease.
- Classify rejection reactions and describe pathology of acute rejection.

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 RADIO DIAGNOSIS

Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 75. Describe the basic principles and clinical applications of MDCT. How does it defer from conventional 1<sup>st</sup> generation CT?
- 76. Enumerate the various hazards of radiation and detail various methods for radiation protection with mention of recommended permissible dose limits
- 77. Discuss the radiological features of Osteoarthritis
- 78. Describe basic principles of CT scan and discuss various generations of CT scans
- 79. Discuss deductive echocardiography and various echocardiographic views
- 80. Discuss the various adverse reactions to contrast media and their management
- 81. Describe the recent developments in X ray film processing
- 82. What are the different methods of reduction of radiation exposure
- 83. Draw and label the radiological anatomy of mediastinum. Discuss in detail radiological examination of posterior mediastinum lesions.
- 10. Write short notes on
  - a) Maximum permissible dose
  - b) Bronchopulmonary segments
  - c) MRI Artifacts
  - d) PACS in radiology
  - e) Flat panel detector

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M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013

PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Development of the lung and its anomalies
- 83. Development of the diaphragm and mention its anomalies
- 84. Describe normal spirometry and mention some (anomalies) abnormal spirometries
- 85. Control of respiration
- 86. Non-respiratory functions of the lung
- 87. Aorto pulmonary window.
- 88. Role of lung in maintenance of acid base balance
- 89. Closing volume
- 90. Phosphodiesterase inhibitors in respiratory medicine
- 10. Medical thoracoscopy.

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Describe the methods of sterilization commonly used. Add a note on recent advances in air filtration.
- 83. Noble Laureates in Microbiology
- 84. Define Hypersensitivity. Write in detail about anaphylaxis and its applications. Add a note on experimental animal used to demonstrate anaphylaxis.
- 85. Define CMI. What are the cells involved in CMI. What are the methods to detect CMI in vitro. Add a note on how to rise CMI in man.
- 86. Describe plasmids and various functions conferred by plasmids.
- 87. Write an essay on Electron microscope.
- 88. Describe alternative and lectin pathways of activation of complement. Enumerate the biological effects of complement.
- 89. Name primary immunodeficiency diseases. Describe DiGeorge's syndrome.
- 90. Explain Hybridoma technology and give its applications in Microbiology
- 10. Write in detail about autoimmunity

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. What is Social Medicine? Explain Social control of medicine.
- 83. Write in detail about concept of well being / mention four indicators of well being..
- 84. Social aspects of excreta disposal in India.
- 85. Discuss health care revolution.
- 86. Define health economics. Role of National Government to Improve Health care.
- 87. Briefly describe the additional criteria for judging causality
- 88. Discuss the role of primordial prevention in control of Non-communicable diseases.
- 89. Discuss the concept of standard error in health research
- 90. Discuss the role of Eugenics & Euthenics in control of genetic diseases
- 10. Give an account of changing concepts in Public Health

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Cognitive and neuropsychological assessment
- 83. Neuro developmental basis of psychiatric disorders
- 84. Neuro imaging techniques in Psychiatry
- 85. Adult Neurogenesis
- 86. Psychiatric rating scales
- 87. Tests for measuring intelligence
- 88. Discuss in detail about Basal Ganglion and their functions
- 89. Explain Glutaminergic system its role in Psychiatry
- 90. Genetics in Schizophrenia
- 10. Voltage gated Ion channel

#### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Enumerate the techniques by which proteins are purified
- 83. Describe the applications of radio isotopes in the study of metabolic pathways. How R.A measured?
- 84. Describe the structures and properties of phospholipids with suitable examples. Add a note on their functions
- 85. Write short notes on:
  - a) Hendersen Hasselbach equation
  - b) X-ray crystallography
- 86. Write short notes on:
  - a) Ultra centrifugation
  - b) Osmolality and Osmolarity
- 87. Colloids and their properties
- 88. Explain the various techniques used to separate and purify bio molecules
- 89. Subcellular fractionation
- 90. Transfer of material and information across membranes.
- 10. Dissaccharides of physiological importance

#### **PHARMACOLOGY**

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Define Pharmacodynamics, write about receptor mechanisms of drug action. Add a note on second messengers
- 83. Structure activity relationship of catecholamines
- 84. ANOVA
- 85. Composition and functions of human ethics committee and add a note on alternatives to 6 animal experiments
- 86. Give principles of Bioassay. Add a note on four point assay.
- 87. Describe the techniques of experimental evaluation of a drug for analgesic activity.
- 88. Students `T' test
- 89. High pressure liquid chromatography
- 90. Kinetics of drug elimination
- 10. Tolerance

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Radiological identification of victims of mass disaster
- 83. Myocardial infarction complications and autopsy findings.
- 84. Describe the procedure of periapical and bite wing ante mortem and postmortem radiographs of jaw for fixing identity
- 85. Describe the clinical and pathological picture of acute renal failure with a special note on crush syndrome.
- 86. Deaths in relation with hospital care and nosocomial infections
- 87. Legal implications of AIDS
- 88. Human skull and its medico legal importance.
- 89. Determination of age by human upper limbs by ossification centers.
- 90. Skeletonized body exhumed from grave with suspicion of foul play. How will you establish the identity, cause, manner and time of death?
- 10. Discuss role of forensic pathologist in mass disaster.

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Cell adhesion molecules
- 83.Na+ K+ ATP
- 84. Physiology of ageing
- 85. Physiology of contraction of smooth muscle.
- 86. Classification of neurons
- 87. Patch clamp technique
- 88. Measurement of body fluid
- 89. Channelopathies
- 90. Abnormal Haemoglobin
- 10. Fatigue

# M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 RADIOTHERAPY

PAPER-I: BASIC SCIENCES, RADIATION PHYSICS

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Discuss quality assurance in Radiotherapy.
- 47. Discuss the relevance of Time Dose Fractionation in Radiotherapy
- 48.ICRU 62.
- 49. Radio Sensitizers and Radio modifiers.
- 50. Cell cycle and its importance
- 51. Planning and installation of Telecobalt unit
- 52. Discuss the lymphatic drainage of breast and latest TNM staging of breast cancer
- 53. Principles of simulation in Radiotherapy.
- 54. Discuss the role Hyperthermia and its clinical applications
- 10. Pathology of Bone tumors

#### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 83. Anatomy and anomalies of extra hepatic biliary system
- 84. Describe segmental Anatomy of Liver and different hepatic reactions
- 85. Describe micturition reflex and formation of calculi
- 86. Immunotherapy
- 87. Pathogenesis of DVT and DVT prophylaxis
- 88. Prophylactic antibiotics in Surgery
- 89. Life cycle of Echinococcus granulosus and its surgical importance
- 90. Supports and ligaments of rectum and anal canal and factors that maintain continence.
- 91. Describe the embryological development and descent of testis. Add a note on surgical importance of undescended testis and its complications.
- 10. Describe the circle of Willis and discuss briefly on etiopathogenesis of intracranial tension

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 90. Bone graft and substitutes
- 91. Frozen shoulder
- 92. Blood supply of femoral head
- 93. Narrate the surgical importance of the arches of foot
- 94. Write an essay on hospital infections and its management
- 95. Write short notes on:
  - a) Russell's traction
  - b) Perkins Traction
- 96. Tendon transfers general principles
- 97. Electrodiagnosis
- 98. Trendelenburg test
- 10. Types of Nerve injury and neuro diagnostic studies.

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 85. Enumerate ocular viruses and lesions caused by them.
- 86. Discuss corneal transparency. What is posterior lamellar Kerato plasty?
- 87. Viral Keratitis.
- 88. Intra vitreal injections
- 89. Ultrasonography in Ophthalmology
- 90. Describe anatomy of angle of anterior chamber also various methods to assess the angle.
- 91. What factors responsible for maintenance of corneal transparency?
- 92. Describe the histo pathology of Retino blastoma
- 93. What are mydriatics and cycloplegics and their uses in Ophthalmology?
- 10. Draw the diagram of strums conoid and its applications.

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# M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

77. Describe the anatomy of organ of corti.

- 78. Discuss role of imaging in otolaryngology.
- 79. Describe surgical anatomy of cervical lymph glands
- 80. Write about the endoscopic anatomy of osteomeatal complex.
- 81. Describe about the various theories of hearing.
- 82. What is Biofilm, What is their role in development of bacterial resistance to antibiotics? Comment on their ways of management.
- 83. What are tumor markers, mention their role in ENT practice?
- 84. What is cell cycle? Mention the role of Chemotherapeutic agents cell cycle.
- 85. What is the auditory pathway? Mention about the role of BERA in localizing various lesions in auditory pathway.
- 10. Preoperative preparations before major head and neck surgery.

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Describe the development of ovary and abnormalities
- 83. Describe the fascial spaces of the hand. Indicate the principles applicable to all incisions in hand.
- 84. Describe the anatomy of visual pathways and visual cortex. Mention the localizing signs for lesions of visual pathway.
- 85. Clinical importance of venous drainage of lower limb / venous perforators.
- 86. Describe the surgical anatomy of scrotum
- 87. Boundaries of middle ear
- 88. Deep cervical fascia
- 89. Subdiaphragmatic spaces
- 90. Achalasia Cardia and its clinical importance
- 10.Lymphatic drainage and applied Anatomy of mammary gland

#### D.V.L.

### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Discuss on functions and contents of sebum
- 83. Structure and functions of eccrine gland
- 84. Role of streptococcus in dermatology.
- 85. Explain the importance of urine examination in STDs.
- 86. Write in detail about dapsone and its role in leprosy
- 87. Classify eczemas. Discuss the current concepts of pathogenesis and management of atopic dermatitis.
- 88. Briefly write about role of innate immunity and about any one soluble factor
- 89. Enumerate basic pathological units of skin and write about any one.
- 90. Odland bodies
- 10. Anatomy of a sweat gland and pathophysiology of sweating.

#### HOSPITAL ADMINISTRATION

# Paper-I – GENERAL ADMINISTRATION AND MANAGEMEMNT IN HOSPITAL FIELD

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Planning as a tool for hospital management
- 47. Matrix organization Hospital as an example
- 48. Various "Decision Making" techniques for a hospital.
- 49. Situational leadership in hospital with examples
- 50. Role of hospital administrator.
- 51. Equity theory for motivation
- 52. Economic order quantity
- 53. Decision tree analysis
- 54. Barriers to communication
- 10. Break even analysis

#### TRANSFUSION MEDICINE

Paper-I – Basic Sciences in Applied Immunohematology and Blood Transfusion.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 10. Human immunoglobulins and their role in transfusion medicine
- 11. Discuss the immunology related to transfusion medicine
- 12. Pathophysiology of DIC.
- 13. Hematopoietic Stem Cell
- 14. Role of HLA in transfusion medicine
- 15. Mechanisms of drug induced AIHA
- 16. Types of ELISA and principles
- 17. Draw complement pathway
- 18. Mixed lymphocyte culture test
- 10. Describe biosynthesis of ABO blood group antigens

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2013

### EMERGENCY MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Causes of Acute respiratory failure
- 2. Mechanism of metabolic response to trauma
- 3. Pathophysiology of heart failure
- 4. Brachial plexus
- 5. Neuro muscular blocking agents
- 6. Anaphylaxis
- 7. Oxygen toxicity
- 8. Describe the importance of creatinine clearance
- 9.ECG changes in hyperkalemia
- 10. Parameters for cardiac performance during mechanical ventilation

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 GENERAL MEDICINE

#### Paper-III – Principles and Practice of Medicine including Theropeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Cluster headache
- 74. Management of hepatic encephalopathy
- 75. Discuss the various syndromes due to heat exposure
- 76. Advances in the management of heart failure
- 77. Pyogenic meningitis
- 78. Approach to a patient with proteinuria
- 79. Transfusion transmitted diseases
- 80. Discuss the hypoglycemia in Diabetes Mellitus
- 81. Classify Portal Hypertension and discuss about Budd-Chiari syndrome.
- 10. Anxiolytic drugs

#### Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Diagnostic criteria for post molar gestational trophoblastic neoplasia (FIGO)
- 74. Non Hormonal contraceptive methods.
- 75. Testicular feminization syndrome.
- 76. Treatment modalities of carcinoma cervix
- 77. Trans cervical sterilization
- 78. Non-Scalpel vasectomy
- 79. Write the etiology, classification and diagnosis of V.V.F
- 80. Management of Nulliparous prolapse uterus
- 81. Discuss complete perineal tear
- 10. Discuss contraception in male

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Complementary feeding
- 74. Microminerals in growth and nutrition
- 75. Classify dengue illness and outline management of severe dengue illness
- 76. Nutritional requirements of infants aged 1- 12 months
- 77. Discuss the immunological basis for Pediatric Vaccination; enumerate newer vaccines and their schedule.
- 78. Discuss the etiology clinical features complications and management of epidemic parotitis
- 79. Describe the life cycle of malaria parasite in human beings and management of complicated malaria.
- 80. Elaborate on bioactive factors in human milk.
- 81. Etiology pathogenesis, lab diagnosis of DIC.
- 10. Differential diagnosis of acute flaccid paralysis in infants (AFP).

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#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 76. Discuss the anaesthetic management of a 30 year old female patient with severe post burn contracture neck posted for release of neck contracture.
- 77.A 60 year old female weighing 100kg is posted for an open cholecystectomy for a cholelithiasis. Write about preoperative preparation and anaesthetic management.
- 78. A 70 year old male weighing 60kg with history of hypertension and BPH is posted for a TURP procedure. Discuss the evaluation, preoperative preparation, anaesthetic management and the possible complications.
- 79. A 50 year old female weighing 40kg is posted for a thymectomy for myasthenia gravis. Discuss your preparation, anaesthetic management and postop care.
- 80. Anaesthetic management of a patient with subdural hematoma with increased intracranial tension for emergency decompression craniotomy.
- 81. Write briefly about the problem of anaesthetic management for trachea oesophageal fistula repair in a neonate of 24 hours age.
- 82. A sixty old patient with COPD for TURP, discuss evaluation and anaesthetic management.
- 83. Anaesthetic considerations for a patient with psychiatric disorders.
- 84. Discuss the anaesthetic management for LeFort II fracture surgery
- 10. Describe complex Regional Pain Syndrome (CRPS), common types and write down the possible ways to reduce pain in CRPS

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 76. Discuss the correct concepts of Myelodysplastic syndrome.
- 77. FNAC of mediastinal masses.
- 78. Use of blood components.
- 79. Synovial fluid examination
- 80. Laboratory diagnosis of coagulation disorders
- 81. Discuss classification and lab diagnosis of hemolytic anemias
- 82. Describe the role of serological tests in diagnosis of various malignancies
- 83. Describe the recent concepts of automation of cervical cytology
- 84. How do you ensure safety of donors and patients during processing and storage of blood components?
- 10. How do you organize quality control in a surgical pathological lab

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#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radiodiagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 66. Describe the segmental anatomy of the liver. Write in detail about imaging in Budd-Chiari syndrome
- 67. Discuss imaging in developmental dysplasia of hip.
- 68. Discuss the role of interventional Radiology in management of uterine fibroids

- 69. How do you investigate a case of pulmonary thrombosis and give various radiological findings.
- 70. How do you investigate a case of Hemoptysis and discuss various imaging findings.
- 71. Discuss the role of MRI in shoulder injuries
- 72. Enumerate various sellar and parasellar mask lesions. Discuss their radiological features.
- 73. Describe the imaging signs of acute hemorrhagic infarction.
- 74. Differential diagnosis of orbital lesions
- 10. Explain in detail neural tube defects. Mention image findings.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 76. Pancreatic pleural effusion mechanism, diagnosis and its management.
- 77. Define corpulmonale, mention the causes and its management
- 78. Pulmonary Thrombo-embolism
- 79. Write the WHO and TNM Classification
- 80. Inflammatory mediators in asthma
- 81. Pulmonary hypertension classification, symptoms and management
- 82. Hypoxemic Respiratory failure
- 83. How you investigate for staging a case of Bronchogenic carcinoma
- 84. Recurrent Pneumonia
- 10. Shaver's disease

## M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 74. Enumerate viruses causing hepatitis. Write in detail about pathogenesis, laboratory diagnosis and all viral markers of Hepatitis B. Add a note on its complications and prophylaxis.
- 75. Microfilaria.
- 76. Mycetoma
- 77. Describe the pathogenesis and lab diagnosis of cytomegalovirus
- 78. Enumerate the fungi causing opportunistic infections. Describe the pathogenesis and lab diagnosis of Zygomycosis.
- 79. Describe the pathogenesis and lab diagnosis of Cytomegalovirus.
- 80. Classify tissue nematode. Describe the pathogenesis and lab diagnosis of lymphatic filariasis.
- 81. Describe the pathogenesis and lab diagnosis of schistosomiasis
- 82. What are interferons? Explain their mechanism and clinical applications.
- 10. Describe Naegleria fowleri.

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M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 SOCIAL & PREVENTIVE MEDICINE Paper-III: Maternal and Child health, Family Planning,

#### Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. National Nutritional Policy. Name a few community Nutrition programmes.
- 74. Health problems due to industrialization
- 75. Role of Public Private partnership in Family Welfare Programme
- 76. Recent trends in mother and child healthcare. Note on Indicators of MCH care.
- 77. Surveillance of drinking water quality and mention ICMR standards of water quality.
- 78. Discuss the role of Indian Factories Act in safeguarding the health and welfare of workers
- 79. Discuss briefly the control measures against global warming
- 80. Discuss the steps of evaluation of Family planning in a district
- 81. Discuss the challenges in public health in the field of geriatrics
- 10. Discuss the control measures for noise pollution in India.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Psychotropics in pregnancy and Lactation
- 74. Neurobiology of Bipolar disorder
- 75. Management of treatment resistant depression
- 76. Erective dysfunction
- 77. Psychiatric and medical complications of morphine abuse
- 78. Psychological disturbances in mentally handicapped children
- 79. Panic attacks
- 80. Somatoform disorders
- 81. Management of schizophrenia
- 10. Rapid tranquilization

#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 BIOCHEMISTRY

#### Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

#### 73. Write short notes on:

- a) Mucosal block theory
- b)Biological value of proteins
- 74. Functional tests of adrenal cortex
- 75. Synthesis and functions of thyroid hormones
- 76. Mechanism of action of steroid hormones.
- 77. Role of selenium in the body
- 78. What is balance diet? How do you prepare a diet for a normal young adult male of sedentary habits?
- 79. Sources and utilization of one carbon moiety.
- 80. Role of copper in health and disease
- 81. Chemiluminescence in clinical diagnosis.
- 10. Define metabolic syndrome. How is it detected? Explain etiology, management, hormonal disturbances associated with Insulin resistance.

### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Treatment of infertility
- 83. Streptogramins and treatment of MRSA infections
- 84. Enumerate about anti platelet drugs used in the disorders of coagulation
- 85. Discuss the current status of pharmacotherapy of chloroquine resistant falciparum malaria and add a note on malaria prophylaxis.
- 86. Incretins in therapy of Type II diabetes
- 87. Protease inhibitors
- 88. Insulin analogues
- 89. Biological response modifiers
- 90. Selective estrogen receptor modulators (SERM)
- 10. Androgen receptor antagonists

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Discuss the injuries caused to the neck structures from compression of neck
- 74. Diagnosis of poisoning in living and dead
- 75. Discuss the complications of chronic alcoholism and add a note on deaddiction therapy of alcoholism.
- 76. Write about environmental and industrial toxicology.
- 77. Body packers.
- 78. Pathological picture of Myocardial infarction
- 79. Brain death, human organs transplantation act 1994
- 80. Discuss Opium poison and its medico legal importance
- 81. Surrogate motherhood and medicolegal problems associated with the procedure.
- 10. A dead body female unknown aged about 18 years found in open field, rigormortis present all over body. No visible external injuries. Discuss role of forensic expert.

### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Micro gravity
- 83. Structure and functional relationship of the vascular system
- 84. Syndromic and nonsyndromic deafness
- 85. Vectorcardiogram
- 86. Sherringtonian rigidity.
- 87. Define Starling's law of heart and its application in health and diseased condition
- 88. Explain the mechanisms that prevent collapse of lungs
- 89. Describe the role of cerebellum in regulation of coordinated voluntary activity and list the clinical features of cerebellar lesion
- 90. Phototransduction.
- 10. Describe the mechanism of coding of intensity and frequency of sound by the Internal ear..

## M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 RADIOTHERAPY

Paper-III: Gynecological Malignancies, GI Malignancies, Hepatobiliary, Uro Genital, Bone Tumours, Soft issues Skin and Appendages, Benign Tumours

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 28. Classify Bone Tumors and discuss the management of Ewing's Sarcoma
- 29. Neo adjuvant treatment in Ca. Rectum
- 30. Role of Radiotherapy in Endometrial Carcinoma
- 31. Role of Chemo radiation in Ca. Bladder
- 32. Classify testicular tumors and discuss the management of seminoma.
- 33. Radiation proctitis and its management
- 34. Classify malignant tumors of skin and discuss the management of Basal Cell Carcinoma
- 35. Invasin Thymoma
- 36. Second primary malignant tumors
- 10. Discuss the management of Prostate carcinoma

## M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 92.ANDI
- 93. Write briefly precancerous conditions of tongue and management of carcinoma tongue.
- 94. Discuss mediastinal tumours
- 95. Pott's spine
- 96. Describe clinical features, investigations and management of putty kidney
- 97. Discuss carcinoma of oesophageus
- 98. Discuss post operative pulmonary complications
- 99. Pathophysiology of venous ulcers. Discuss their management.
- 100. Describe briefly the clinical features and management of `Strangulated Femoral Hernia'
- 10. Discuss rupture of spleen

#### M.S. DEGREE INTERNAL EXAMINATION – JUNE, 2013

#### **ORTHOPAEDICS**

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Describe gait cycle and enumerate abnormal gait patterns
- 74. Discuss the etiopathology and management of tuberculosis of the dorsal spine. Management of paraplegia of sudden onset.
- 75. Discuss Pathology, Clinical features, Radiological features of osteosarcoma and management of osteosarcoma lower end of femur in a boy aged 15 years.
- 76. Write short notes on:
  - a) Madelung's deformity
  - b) Sudeck's osteodystrophy
- 77. Write short notes on:
  - a) Caudaequina syndrome
  - b) Dupuytren's contracture
- 78. Discuss the sequelae of post polio residual paralysis and various contractures and management
- 79. Narrate the coaxvara group of diseases. Describe in detail slipped capital femoral epiphysis symptoms, management, complications
- 80. Congenital vertical talus
- 81. Osteotomies around pelvis.
- 10. Lumbar canal stenosis

# M.S. DEGREE INTERNAL EXAMINATION –JUNE, 2013 OPHTHALMOLOGY

Paper-III : Conjunctiva, cornea sclera, lens, glaucoma, uvea, retina, vitreous, squint.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 76. Discuss dry eye.
- 77. Early diagnosis of primary open Angle Glaucoma and Surgical management.
- 78. Discuss non surgical treatment of squint
- 79. Principles of ophthalmic plastic surgery. Discuss surgical corrections of Entropion
- 80. How would you proceed to manage gradual fall of vision in elderly persons aged 65 years.
- 81. Classify Uveitis and its management
- 82. WHO classification of Vitamin A deficiency and Ocular manifestations
- 83. Discuss effects of closed globe injury.
- 84. What are the difference types of retinal detachment and their management
- 10. What is NPCB and its functions?

#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Discuss clinical assessment of a deaf child
- 74. Discuss clinical features, investigations and management of Atrophic Rhinitis
- 75. Discuss clinical features and management of malignant lesions of maxilla.
- 76. Differential diagnosis and investigations for hoarseness of voice.
- 77. Discuss differential diagnosis and management of space occupying lesions of parapharyngeal space.
- 78. How do you manage in rehabilitation of post laryngectomy individual? Mention about various techniques available in voice rehabilitation?
- 79. What is submucus fibrosis (progressive oral fibrosis)? What ae the various manifestations? Write about various modalities of management.
- 80. Mention about various Neck incisions and comment on merits and demerits of each in the management of Head and Neck Malignancies.
- 81. What is thyroplasty? Mention about various types and their role in management of various laryngeal disorders.
- 10. What is induction chemotherapy, concurrent chemotherapy?

  Mention about monoclonal antibodies and their role in medical oncology.

#### M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Histology of cartilages
- 74. Stem cells
- 75. Polymerase chain reaction (PCR).
- 76. Procedure to be followed in embalming for international transportation of cadaver.
- 77. Plastination technique
- 78. Histology of testis
- 79. Epithelium of urinary tract
- 80. Celloidin embedding.
- 81. X-linked inheritance
- 10. Staining techniques of nervous tissue.

# M.D.DEGREE INTERNAL EXAMINATION - JUNE, 2013 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Discuss clinical features, differential diagnosis, complications and management of sec. syphilis in pregnant woman.
- 83. Classify anti retroviral drugs, their doses and toxicity. How to initiate and follow up of patients on ART medication.
- 84. DD for inguinal bubo.
- 85. Dysuria. Explain in detail the diagnosis investigations and management of dysuria
- 86. Trophic leprosy.
- 87. Ocular changes in leprosy.
- 88. Management of HIV infection in pregnancy
- 89. Bridge population.
- 90. Manifestations of early congenital syphilis.
- 10. Animal models in leprosy

### M.D. DEGREE INTERNAL EXAMINATION – JUNE, 2013 HOSPITAL ADMINISTRATION

#### Paper-III— Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Macro-level planing of a hospital
- 56. Hospital space module
- 57. Planning considerations of emergency department
- 58. Hospital planning team
- 59. Vertical and horizontal tractions in a hospital
- 60. Nurse patient relation
- 61. Medical insurance
- 62. Disaster management during floods
- 63. Consumer relations management
- 10. Risk management in hospitals

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2013

## EMERGENCY MEDICINE Paper-III – Recent Advances in Critical Care

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Complications during dialysis
- 2. Effects of Lactic acidosis in critical illness
- 3. Clinical features, diagnosis and management of DIC
- 4. Importance of End tidal CO2 monitoring during CPR
- Clinical effects and management of hypomagnesaemia in critically ill patients
- 6. Brief notes on adverse consequences of blood transfusion
- 7. Explain diagnostic criteria for UTI in catheterized patients
- 8. Hemodynamic patterns and management in scorpion sting envenomation
- 9. Propofol infusion syndrome in critically ill patients
- 10. Apnea test

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Bilirubin metabolism and the approach to a patient with Jaundice
- 2. Pharmacokinetics and pharmacodynamics- relevance in clinical practice
- 3. Approach to patient with fever and rash.
- 4. Atherosclerosis, pathogenesis and risk factors
- 5. End of life care- principles and the approach
- 6. Oxygen dissociation curve and its determinants
- 7. Cerebral circulation and its relevance in neurological localization
- 8. Structure and function of the Nephrons, explain how medullary hypertonicity is achieved?
- 9. Vitamin D and Calcium homeostasis
- 10. Magnesium in Health and Disease

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013

#### OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 92. Describe human placenta and add a note on placental functions.
- 93. Pelvic cellular tissue and its clinical significance.
- 94. Describe the physiology of ovulation
- 95. Describe the conditions causing premature activation of common pathways of parturition.
- 96. Discuss the factors controlling lactation.
- 97. Tocolytic drugs and their use in preterm labor.
- 98. Blood supply of uterus and factors controlling blood loss.
- 99. Androgen insensitivity syndrome clinical features and management
- 100. Spermatogenesis and causes for

male infertility

10. Thromboprophylaxis in pregnancy.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Write the fetal circulation & physiological changes which occur at birth
- 92. Discuss pathogenesis of cerebral edema. Outline the management of cerebral edema.
- 93. Describe the development of diaphragm & its anomalies
- 94. Describe the mechanism of temperature regulation, clinical features, complications & management of hypothermia in children.
- 95. Discuss the drugs used in the treatment of drug resistant tuberculosis
- 96. List the lobes of lungs. Give their surface markings. Discuss its use in clinical medicine.
- 97. Classify anti epileptic drugs. Discuss the drugs useful in petitmal epilepsy.
- 98. Describe the bilirubin metabolism & its importance in new born.
- 99. Write life cycle of falciparum malarial parasite. Enumerate the drugs used in falciparum malaria infection & write briefly their action.
- 100. Describe the cascade of coagulation. Outline the coagulation abnormalities in snake bite.

# M.D. DEGREE EXAMINATION – OCTOBER, 2013 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 93. Describe various factors effecting uptake distribution of inhalational anaesthetic agents.
- 94. Describe the absorption, mechanism of action of local anaesthetic agents injected in to the epidural space.
- 95. Write a note on Horace Wells
- 96. Describe a method of central venous pressure cannulation, its uses complications and limitations.
- 97. Discuss the principles of pulse oxymetry, its clinical uses and reliability.
- 98. Describe Bain circuit, discuss about its advantages and disadvantages.
- 99. Write about the methods of monitoring the neuro-muscular blockage during surgery.

100. Write a note on physiological changes during hypothermia.

101. Describe the pharmacology and clinical utilization of heparine.

102. Write about oxygen cascade,

oxygen transport and oxygen dissociation curve.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 94. Discuss the molecular events in cell growth.
- 95. Define Apoptosis. Enumerate the differences between necrosis and apoptosis. Discuss the mechanism of apoptosis with examples.
- 96. Role of Lysosomes in health and disease
- 97. Discuss microbial carcinogenesis.
- 98. Discuss free radicals in health and disease
- 99. Enumerate the causes and types of pathological calcification. Describe the morphological features in each type.
- 100. Give an account of Amyloidosis
- 101. Describe the immunopathology and laboratory diagnosis of leprosy
- 102. Describe Immunological tolerance
- 103. Describe Integrins and Selectins

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 84. Describe the anatomy of Gastro-oesophageal junction and imaging of hiatus hernia.
- 85. What is characteristic curve? Explain its importance in radiography image formation.
- 86. What health effects do ionizing radiations cause? Describe the principles and methods of radiation protection.
- 87. Classify and elaborate the different types of contrast used in Magnetic Resonance Imaging. (MRI)
- 88. What are the indications of lower limb angiography and how would you perform the procedure?
- 89. Discuss the differential diagnosis and radiological features of Seronegative Spondyloarthropathies.
- 90. Describe the anatomic location and drainage of thoracic lymph nodes and describe in brief the patterns of lymph node involvement in various pulmonary and extra-pulmonary diseases.
- 91.List the different types of X ray tubes used in radiography machine and explain their operations with neat diagram.
- 92. Explain the indications and procedure of Micturating Cystourethrogram.
- 93. Discuss the patho-physiology of various kinds of pulmonary collapse and their imaging evaluation

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Alveolar capillary membrane
- 92. Pulmonary defense mechanisms
- 93. Closing volume and closing capacity
- 94. Lymphatic drainage of the lung
- 95. Diffusion capacity of lung DLCO
- 96. Azygos lobe
- 97. Respiratory events during sleep.
- 98. Polymerase chain reactions
- 99. Pulmonary surfactant
- 10.Pathogenesis of pulmonary fibrosis

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Recent developments in fluorescence microscopy
- 92. Describe methods of antigen detection for diagnosis of infectious diseases
- 93. Gaseous disinfectants
- 94. Write an essay on type-II immediate hypersensitivity
- 95. Describe polymerase chain reaction for use in diagnostic microbiology.
- 96. Passive immunity
- 97. Mechanisms of transplantation immunity
- 98. Cytokines
- 99. Automated culture methods
- 10. Virulence factors of the bacteria

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Write about issues & implementation of randomized controlled trial for a new vaccine.
- 92. Mention the diseases transmitted by insects & what measures are taken to control these insects to minimize transmission of diseases in community.
- 93. What do you mean by protected water supply & how will you plan to supply protected water to a town with a population of 1 lakh.
- 94. What do you mean by learning, write in detail about conditions affecting learning & types of learning
- 95. Mention various methods of liquid waste disposal. Describe suitable methods of liquid waste disposal to a rural community.
- 96. Mention criteria for healthful housing, social goals & indicators of housing.
- 97. Define society. What are the various social problems which are affecting health of the community?
- 98. Write in detail about evaluation of effectiveness of health education programme.
- 99. Mention statistical tests of significance, how they are useful in research methodology.
- 100. How do you assess nutritional status of the person, add a note on nutritional rehabilitation.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Defense Mechanisms
- 92. Gender identity.
- 93. Student `t' Test
- 94. Operant conditioning.
- 95. Physiology of Penile Erection
- 96.fMRI.
- 97. Evoked Potential
- 98. Autoreceptors
- 99. Rapid Eye Movement (REM) Sleep
- 10. Bender Gestalt Test (BGT).

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Classify electrophoresis and write its four applications.
- 92. Explain quality control programme in laboratory.
- 93. Two applications each of PSA, HCG, AFP, CEA and CA-124.
- 94. Difference between Molar solution and Molal solution. Write how they are prepared in the laboratory giving one example each.
- 95. Physiological important peptides.
- 96. Centrifugal analyser.
- 97. Describe the ATP synthesis in mitochondria.
- 98. Cytochrome P450 and its importance.
- 99. Diagnostic isoenzymes
- 10. What is PCR? Give two applications of PCR.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Drug tolerance
- 92. Plasma half life and its significance
- 93. Screening for a new molecule for anti-depressant activity
- 94. Student's test
- 95. Drug-drug interaction
- 96. Euthanasia for experimental animals
- 97. Spectrophotometry
- 98. Radioimmunoassay
- 99. Chronopharmacology and its significance
- 10. Phase 0 of clinical trial

#### M.D. DEGREE EXAMINATION - OCTOBER, 2013

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Cleavage lines of Langer
- 92. Stature from bone fragments
- 93. Vitreous humor chemistry
- 94. Medicolegal aspects of organ transplantation
- 95. Sex hormones
- 96. Blood groups and their importance
- 97. Cardiovascular changes after birth
- 98. Brain stem reflexes and their importance
- 99. Hyoid bone
- 10. Endocrine system and sudden death

#### M.D. DEGREE EXAMINATION - OCTOBER, 2013

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Resting membrane potential
- 92. Explain excitation contraction coupling in relation to skeletal muscle
- 93. Contribution of Sherrington to physiology
- 94. Apoptosis
- 95. Describe the role of G-Proteins as intracellular signaling molecules
- 96. Classify body fluid compartment and explain any one method of measurement for each
- 97. Co-transport
- 98. Blotting techniques
- 99. Strength Duration curve
- 10. Wallerian Degeneration and Regeneration of nerve

#### RADIOTHERAPY

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 20. Hypofractionation
- 21.MLC
- 22. Explain relationship between OAR, RBE and LET
- 23. Explain LENT
- 24. Remote After Loading device for brachytherapy
- 25. P-value
- 26. Temozolomide
- 27. Anatomy of female pelvis
- 28. Thimble ion chamber
- 29. EGFR receptor and importance

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Anatomy of Ingunal Canal (Fruchat Triangle)
- 74. Anatomy of Gall Bladder
- 75. Gastric function Test
- 76. Thyroid Hormone
- 77. Life cycle of Echinococcus granulosus and its surgical importance
- 78. Electrolyte Balance
- 79. Pathology of Carcinoma Lung
- 80. Classify the jaw swellings and discuss their pathology
- 81. Abscess
- 10. Muscle relaxant.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

99. Course of lateral popliteal nerve and foot drop	
100.	Radiological signs of Perthes
disease	
101.	Parathyroid hormone
102.	Antitubercular drugs
103.	Flap covers in compound fractures
104.	De Quervain's disease
105.	Rotator Cuff
106.	Trendelenburg's sign
107.	`Giant Cell'
10.Bohler – Brown splint	

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

94. Blood aqueous barrier

95. Autorefractometer

96. Colour vision

97. Genetic in Retinoblastoma

98. Morphology and culture of bacillus pyocyaneus

99. Discuss the uses of steroids in ophthalmology

100. Supranuclear pathway

101. 13<sub>q</sub> deletion syndrome

102. Laser biophysics

103. Various dye test in evaluation of

chronic dacryocystitis

#### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 86. Applied anatomy of para pharyngeal space
- 87. Physiology of deglutition
- 88. Organ of corti
- 89. Applied anatomy of the sphenoid sinus
- 5. Methicillin resistant staphylococcus aureus
- 6. Management of hypovolemic shock in a 5-year-old child
- 7. Development of the middle ear
- 8. Vocal hygiene
- 9. Cricoid cartilage
- 10. Epidermal Growth Factor Receptor (EGFR)

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. ERB's point and applied Anatomy
- 92. Describe the movements of eye ball. Add a note on applied anatomy.
- 93. Surgical Anatomy of scalp
- 94. Porto-Caval Anastomosis.
- 95. Rectouterine pouch
- 96. Surgical spaces of hand
- 97. Femoral canal
- 98. Broncho pulmonary segments
- 99. Cervical lymph nodes
- 10. Scrotal Sac and Contents

#### D.V.L.

#### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Ultra structure of mycobacterium leprae
- 92. Role of skin in thermoregulation
- 93. Stages of hair cycle
- 94. Prostatic massage
- 95. Morphological characteristics of HIV
- 96. Vitamins and skin
- 97. Cutaneous innervation
- 98. Steps of collagen synthesis
- 99. Normal skin flora
- 10. Structure of Eccrine sweat gland

# M.D. DEGREE EXAMINATION - OCTOBER, 2013 HOSPITAL ADMINISTRATION

Paper-I – General Administration and Management in Hospital field

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Strategic planning process
- 74. BCG and TOWS matrix
- 75. Leadership styles
- 76. Conflict management in hospitals
- 77. Transactional analysis
- 78. Manpower Planning in Hospitals Issues and Challenges
- 79. Any five Inventory Control Techniques
- 80. Role of automation in stores management
- 81. Costing in Health Services
- 10. Cost containment in Hospitals

## M.D. DEGREE EXAMINATION – OCTOBER, 2013 GENERAL MEDICINE

Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 66. How do you evaluate a patient who is brought with history of "dizziness/vertigo"?
- 67. Cerebral Vein thrombosis; Diagnosis and management
- 68. Newer Antiepileptic drugs
- 69. Hypersensitivity vasculitis
- 70. Clinical evaluation and management of a recently diagnosed obese diabetic
- 71. Hypothyroidism etiology, clinical features and diagnosis
- 72. Deliberate self harm, the problem and the causes in India
- 73. Diagnosis and management of SLE
- 74. Basilar migraine
- 10. Hyperuricemia

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 56. Define perinatal mortality rate. Discuss the factors influencing and measures to decrease perinatal mortality in India.
- 57. Prognostic factors in eclampsia
- 58. External cephalic version.
- 59. Discuss the management of Rheumatic heart disease complicating pregnancy
- 60. Management of preterm PROM
- 61. Antenatal management of IUGR
- 62. Congenital Rubella syndrome
- 63. Fetal echocardiography.
- 64. Day care obstetrics
- 10. Management of second of the twin in labor

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. You are asked to plan a neonatal unit for a hospital with an annual deliveries of 3500. Discuss in detail the space, man power & equipment requirements.
- 68.A term baby weighing 2.9 kg was brought with convulsions 16 hours after birth. What are the likely causes? How will you investigate & manage the baby.
- 69. Discuss approach to a child with delayed speech.
- 70. What is SMR? Discuss secular trend in children.
- 71. Write etiology, clinical manifestations & treatment of autistic disorder.
- 72. Write briefly on Preventable & treatable causes of mental retardation.
- 73. Approach to a child with failure to thrive.
- 74. Retinopathy of prematurity.
- 75. Describe ARI control programme.
- 76. Define developmental delay & developmental dissociation. Outline the screening & definitive tests for diagnosis of developmental delay.

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Write a note on venous thromboembolism risk factors and current methods of prevention.
- 2. Discuss about positive pressure ventilation in prone position for adult respiratory distress syndrome patients.
- 3. Discuss about recent advances in cardio pulmonary resuscitation
- 4. Write a note on immuno nutrients
- 5. Discuss about recent concepts in the management of massive intra operative blood loss
- 6. Discuss about anaesthetic problems of kidney transplantation surgery.
- 7. Write a note on management of intra operative atrial fibrillation
- 8. Discuss about HIV patients coming for anaesthesia and surgery.
- 9. Write a note on current status of premedication in children.
- 10. Discuss about assessment of blood loss during TURP surgery.

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### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Discuss the nodular patterns in lymph nodes
- 56. What is Barrett's oesophageus? Discuss its molecular pathology
- 57. Describe the mechanisms of viral carcinogenesis in reference to hepatocellular carcinoma.
- 58. Status of ER/PR (estrogen and progesterone receptors) in Malignancies.
- 59. Discuss NASH (non alcoholic steatohepatitis)
- 60. Comment on Premalignant lesions of the prostate
- 61. Discuss diabetic nephropathy in detail.
- 62. Comment on cardiac vegetations
- 63. Discuss polypoid lesions of GIT
- 10. Discuss papillary carcinoma of thyroid

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 46. Discuss the imaging features and differential diagnosis of metaphyseal bone tumors.
- 47. Discuss differential diagnosis and radiological features of generalized increase in bone density.
- 48. Discuss the role of imaging in evaluation of renal transplant.
- 49. How will you investigate a case of primary infertility?
- 50. How would you investigate a case of hypertension in a young adult?
- 51. Describe the role of imaging in evaluation of craniocerebral trauma.
- 52. Discuss the differential diagnosis and imaging evaluation of intramedullary neoplasms of the spinal cord.
- 53. Discuss the role of Magnetic Resonance Imaging (MRI) in evaluation of prostate gland.
- 54. Describe the radiological anatomy of the diaphragm and discuss the various diaphragmatic hernias.
- 55. Discuss the differential diagnosis and imaging features of posterior mediastinal masses.

#### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Ghon's complex
- 56. Latent tuberculosis
- 57. Role of Surgery in the management of Pulmonary tuberculosis
- 58. Present day role of BCG vaccination
- 59. Diagnosis, management and complications of tubercular empyema
- 60. Tuberculosis and pregnancy
- 61. Poncet's disease
- 62. Tuberculosis and industry
- 63.TB gold test
- 10. Daily regimens Vs intermittent regimens

### M.D. DEGREE EXAMINATION – OCTOBER, 2013 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Melioidosis
- 58. Vibrio cholerae O 139.
- 59. Epidemiology of leptospirosis in India. Add a note on recent methods of laboratory diagnosis for the condition.
- 60. Vaccine trials against leprosy.
- 61. Clostridium difficile
- 62. Epidemiology and microbiology of non toxigenic Corynebacterium diphtheriae.
- 63. Name the bacterial agents causing P.U.O. Describe the laboratory diagnosis of Brucellosis.
- 64. Helicobacter Pylori.
- 65. Drug resistant Salmonella Typhi in India.
- 66. Pathogenesis and clinical manifestations of Staphylococcal toxin mediated diseases. Add a note on laboratory diagnosis.

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### M.D. DEGREE EXAMINATION – OCTOBER, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 59. Write in detail about emerging viral diseases & remerging bacterial diseases.
- 60. What are the components of national tobacco control programme & mention important provisions of cigarette & other tobacco products Act, 2003 ?
- 61. Critically review national nutrition policy, add a note on food safety bill.
- 62. Mention adverse events following immunization. How do you evaluate death following immunization?
- 63. What is roll back malaria? Write in detail about national malaria drug policy-2010.
- 64. Define disinfection. Mention types, factors affecting efficacy & recommended disinfection procedures.
- 65. Define Syndromic approach. Write in detail about control of sexually transmitted diseases.
- 66. Mention causes of mental ill health, types & warning signals. Write in detail about National Mental Health Programme.
- 67. What are the causes of cancer? Mention warning signs. Write in detail about cancer screening.
- 68. Mention occupational diseases. Write in detail about medical, engineering & legislative measures in the prevention of occupational diseases.

### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Normal Pressure Hydrocephalus
- 56. Encephalins
- 57. Limbic system
- 58. ArgyI Robertson Pupil
- 59. Reversible Dementias
- 60. Ascending Reticular Activating System
- 61. Hypothyroidism
- 62. Complex partial seizures
- 63. Post stroke depression
- 10. Wernicke's Encephalopathy.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 56. What are essential fatty acids? Enumerate them. Write two functions and one deficiency manifestation?
- 57. Explain irreversible steps of glycolysis with the enzymes involved. Write energetic under aerobic and anaerobic conditions.
- 58. Glucose Alanine cycle.
- 59. What are Immunoglobulins? Name the immunoglobulin which serves as first line of defense.
- 60. Draw a well labelled diagram of DNA structure.
- 61. What are porphyrias? Classify them and discuss acute intermittent Porphyria.
- 62. Inhibitors of oxidative Phosphorylation.
- 63. Discuss the various ways by which ammonia is produced from various metabolities in the body.
- 64. Gluconeogenesis in starvation and well fed state.
- 65. Explain the biochemical basis of Lesch-Nyhan syndrome and Von Gierke's disease.

#### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Summarize pharmacodynamics of morphine in myocardial infarction.
- 65. Non-epileptic uses with rational of antiepileptic drugs.
- 66. Summarize the sites of action with examples of drugs modulating adrenergic neurotransmission.
- 67. Role of diuretics in diabetes insipidus.
- 68. Inotropic agents in therapy of congestive cardiac failure
- 69. COMT inhibitors.
- 70. Pharmacotherapy of hypertensive emergency.
- 71. Varenicline.
- 72. Role of aldosterone antagonists in congestive heart failure.
- 10. Ramelteon.

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 68. Biosafety considerations during autopsy.
- 69. Shock lung.
- 70. Complications of cirrhosis.
- 71. Myocardial infarction at a distance.
- 72. Amniotic fluid embolism.
- 73. Tissue preservation for microbiology and pathology studies.
- 74. Pathophysiology of anaphylactic death.
- 75. Uses of Microbiology in Forensic Medicine
- 76. Radiation sickness.
- 77. Pathophysiology of starvation.

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Explain the role of glucocorticoids in anti-inflammatory and antiallergic conditions.
- 65. Oral contraceptive pills.
- 66. Discuss in details the factors affecting the growth and development of child.
- 67. Somatomedins.
- 68. Iron deficiency anaemia.
- 69. Gonadotrophic hormones.
- 70. Reticulo endothelial system.
- 71. Flight / Flight reactions.
- 72. Explain the role of kidney in the maintenance of water balance in the body.
- 10. Hypothalamo- pituitary ovarian axis.

#### RADIOTHERAPY

Paper-II: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 29. Discuss the management of carcinoma tonsil T3N1M0
- 30. Classify lung tumours. Discuss the management of stage 4 Adenocarcinoma of lung.
- 31. Discuss the post operative management of Glioblastoma Multiforme.
- 32. Discuss the treatment of stage I glottic cancer
- 33. Discuss the role of breast conservation therapy in a 40 year old woman with ca Right Breast cT2NoMo
- 34. Discuss the management of carcinoma cervix stage IIIB.
- 35. Discuss the staging and management of esthesioneuroblastoma.
- 36. An 8 year old boy presented with non metastatic Osteosarcoma of R lower end of Femur. Discuss the management.
- 37. Classify tumours of maxillary sinus and discuss the management of a T4N1M0 stage patient.
- 38. Classify pituitary tumours. Discuss the role of radiotherapy in the management of prolactinoma.

### M.S. DEGREE EXAMINATION – OCTOBER, 2013 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Discuss the degrees, Pathophysiology and fluid management of burns.
- 56. Describe aetiology, clinical features and management of Incisional Hernia.
- 57. Classify the swelling of thyroid and describe the pathology and management of well differentiated Carcinoma.
- 58. Describe the aetiology, clinical features and management of diverticular disease of the colon.
- 59. Describe incidence, aetiology, clinical features and management of congenital dislocation of the hip.
- 60. Describe clinical feature and management of Pulmonary Embolism.
- 61. Sub diaphragmatic abscess.
- 62. Fracture-dislocation of the Forearm.
- 63. Describe the causes, clinical features and management of injuries of the Kidney.
- 10. Cystic Hygroma.

### M.S. DEGREE EXAMINATION – OCTOBER, 2013 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

- 65. Discuss the management of compound fractures.
- 66. Discuss classification clinical features and management of calcaneum fractures.
- 67. Classify Hip dislocations and discuss management of posterior dislocation of hip.
- 68. Monteggia's fracture dislocation.
- 69. Classify spinal injuries. Describe clinical features and management of  $\mathsf{T}_{11}$  fracture dislocation.
- 70. Fracture patella.
- 71. Functional cast bracing.
- 72. Proximal femoral nail.
- 73. Fracture scaphoid.
- 10. Tendo-achilles rupture.

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### M.S. DEGREE EXAMINATION – OCTOBER, 2013 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 58. Bielschowsky head tilt test.
- 59. Incidence and management of posterior capsular rupture.
- 60. Surgical management in treating various types of coloboma of lids.
- 61. Write short notes on
  - a) Artificial tear substitutes
  - b) School eye health survey
- 62. Valve implant surgery in Glaucoma.
- 63. Tyrosinase Oculocutaneous Albinism.
- 64. Differential diagnosis of hazy cornea in child age group below 5 years.
- 65. Cryptophthalmos.
- 66. Clinical features of Von Hippel-Lindau disease and its differential diagnosis.
- 67. Salzmann's nodular degeneration.

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## M.S. DEGREE EXAMINATION – OCTOBER, 2013 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Discuss the clinical features and management of allergic fungal Rhinosinusitis.
- 58. Prevention of ototoxicity.
- 59. Management of solitary nodule of the thyroid gland.
- 60. Management of recurrent respiratory papillomatosis.
- 61. Write the causes of vertigo. Discuss the surgical management of Meniere's disease
- 62. Hearing assessment in a new born.
- 63. Clinical features and management of acute coalescent mastoiditis.
- 64. Evaluation of a suspected case of sleep apnea syndrome.
- 65. Pierre-Robin syndrome.
- 66. Discuss the pathology, clinical features and management of Carcinoma pyriform fossa.

## M.D. DEGREE EXAMINATION – OCTOBER, 2013 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Sub-occipital triangle.
- 65. Collateral circulation around elbow.
- 66. Wall of the pharynx.
- 67. Sesamoid bones.
- 68. Suprarenal glands.
- 69. Eye ball.
- 70. Caecum
- 71. Transverse section at T<sub>4</sub> vertebra (labelled diagram only)
- 72. Right kidney
- 10. Anterior compartment of leg.

#### D.V.L.

#### Paper-II

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Autosensitization dermatitis.
- 47. Photo dynamic therapy.
- 48. Inherited palmoplantar keratodermas.
- 49. Pigmented purpuric dermatoses.
- $50.D/_D$  of fever and an exanthema in a 20 year old patient.
- 51. Aminoquinolines in dermatology.
- 52. Mode of action and classification of topical steroids.
- 53. Pediculosis infestation.
- 54. Cutaneous manifestations of HIV disease.
- 10. Clinical types and management of Pityriasis Rubra Pilaris.

#### HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Revised National Tuberculosis Control Programme (RNTCP).
- 83. Epidemiology of Hospital Acquired Infection.
- 84. Health Indicators.
- 85. Tests of Significance.
- 86. Health Information System in India.
- 87. Indigenous Systems of Medical Care in India.
- 88. Total Quality Management in Hospitals.
- 89. Progressive Patient Care.
- 90. International Health Regulations.
- 10. Errors of Measurement.

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Urinary tract infections- and the problem of recurrent infections
- 2. Evaluation of Isolated Hematuria
- 3. Thrombolysis in clinical practice
- 4. Pancytopenia evaluation
- 5. Acute Pancreatitis diagnosis and management
- 6. Hypercalcemia detection, evaluation, management
- 7. Hypoadrenalism in India Causes, detection, evaluation & management
- 8. Tumour lysis syndrome
- 9. Refractory Hypertension- causes, evaluation and management
- 10. Tachyarrhythmias, Diagnosis, evaluation and management

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 OBSTETRICS & GYNAECOLOGY

Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Discuss the male factors in infertility.
- 83. Discuss about modern surgical management of dysfunctional uterine bleeding.
- 84. Write short notes on:
  - a) Non-contraceptive benefits of non hormonal contraception
  - b) Contraception in males
- 85. Hot flushes etiology and management.
- 86. Management of malignant ovarian tumour.
- 87. Describe pelvic organ supports. Add a note on pelvic floor reconstructive surgeries.
- 88. Progesterone only pill.
- 89. Myomectomy indications and prevention of complications.
- 90. LAVH vs NDVH (no descent vaginal hysterectomy).
- 10. Tubal recanalization risks and benefits.

### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Describe the role of vitamin-A in health & disease. Enumerate clinical manifestations of vitamin-A deficiency & its treatment.
- 83. Enlist the clinical & anthropometric criteria for diagnosis of severe acute malnutrition (SAM).
- 84. Briefly discuss the pulmonary disorder seen in children with HIV/AIDS.
- 85. Tabulate the differentiating features of various types of JRA. Outline the diagnostic criteria of juvenile rheumatoid arthritis. Outline a scheme of investigations for a child with suspected JRA.
- 86. Management of dengue shock syndrome.
- 87. Outline the goals of baby friendly hospital initiative (BFHI). Enumerate ten steps to successful breast feeding. Mention contraindications to breast feeding.
- 88. Nosocomial infections
- 89. Various treatment modalities in acute ITP.
- 90. Diagnosis & management of childhood obesity.
- 10. Importance of newer/ optional vaccines.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 85. Discuss the anaesthetic management of a case of retained placenta.
- 86. Discuss the management of mismatched blood transfusion under general anaesthesia.
- 87. Describe the anaesthetic problems and management of 11 years old patient cerebral abscess drainage having Tetralogy of Fallot.
- 88. Write a note on local block for inquinal hernia repair.
- 89. Discuss about post extubation laryngospasm causes and management.
- 90. Write a note on intentional hemodilution.
- 91. Describe the anaesthetic management of a chronic smoker posted for left lower lobectomy.
- 92. Write a note on nutrition of patients on ventilators.
- 93. Discuss the management of a case of cannot intubated, cannot ventilate situation.
- 94. Discuss about drug interactions in anaesthesia.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 85. Describe blood groups and discuss transfusion reactions and complications.
- 86. Laboratory criteria for diagnosis of Hemophagocytic syndrome.
- 87. Discuss Quality assurance in blood banks.
- 88. Discuss sideroblastic anemia.
- 89. Describe pathogenesis and clinical effect of Protein C deficiency.
- 90. Comment of Microalbuminuria.
- 91. Hematological changes in Dengue fever.
- 92. Bethesda classification in cervical cytology.
- 93. Classify Acute Leukemias and discuss their lab diagnosis.
- 94. Immunofluorescence in pathology.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 75. Enumerate the points you would convey in your report of HRCT of paranasal sinuses in a patient being considered for endoscopic sinus surgery (FESS).
- 76. Discuss the sonographic techniques and criteria used in evaluation of uterine cervical incompetence.
- 77. Describe the imaging findings and role of intervention in management of aneurysm of the aorta.
- 78. Enumerate and describe the management of Central Nervous System (CNS) vascular malformations.
- 79. Describe the imaging protocol of Multi Detector Computed Tomography (MDCT) angiography in the evaluation of coronary arteries.
- 80. Discuss the imaging and differential diagnosis of hypervascular Liver Space Occupying Lesions (SOLs).
- 81. Describe the differential diagnosis of a palpable breast lump in a 44 yr old female with special reference to imaging features.
- 82. How will you investigate a neonate presenting with an abdominal lump?
- 83. Discuss the role of imaging in multiple gestations.
- 84. Discuss the evaluation of thyroid nodules on ultrasonography with description of features differentiating benign from malignant nodules.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 85. Complications and management acute severe asthma.
- 86. Approach to a case of solitary pulmonary nodule.
- 87. Lung transplantation.
- 88. Asbestosis.
- 89. Snoring related breathing disorders.
- 90. Radiation pneumonitis.
- 91. Non invasive mechanical ventilation.
- 92. Diagnosis and management of pulmonary thromboembolism.
- 93. Non pulmonary manifestations of Bronchogenic carcinoma.
- 94. Advances in the treatment of pulmonary Hypertension.

# M.D. DEGREE EXAMINATION – OCTOBER, 2013 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 83. Pathogenesis and laboratory diagnosis of human rabies.
- 84. Give an account of SARS virus.
- 85. Describe hepatitis E virus. Add a note on its laboratory diagnosis.
- 86. Prion mediated diseases in humans.
- 87. Discuss the pathogenesis and newer diagnostic methods of neurocysticercosis.
- 88. Name the parasites causing anaemia. Describe Ankylostomiasis.
- 89. Describe the epidemiology of Kala azar in India. Add a note on laboratory diagnosis of the condition.
- 90. Clinical manifestations and diagnosis of *Strongyloides stercoralis* in HIV patients.
- 91. Discuss recent approaches for diagnosis of lymphatic filariasis.
- 92. Discuss the epidemiology of cryptococcal meningitis in India. Add a note on laboratory diagnosis of the condition.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Mention sources of air pollution, effects of air pollution & describe in detail about control & prevention of air pollution.
- 83. What are the determinants of maternal mortality in India? Mention maternal health care indicators. What are the preventive & social measures aimed at reducing MMR.
- 84. Discuss the strategies under RCH III critically comment about its merits & demerits.
- 85. Write in detail about national population policy & add a note on injectable contraceptives.
- 86. Describe impact of hospital waste on health and outline measures for disposal of hospital waste with 1,000 beds.
- 87. Discuss social security measures that are available for pensioners in India.
- 88. Describe adolescent health problems & programmes towards improving the health status of adolescents.
- 89. What are the objectives of Janani Suraksha Yojana? Mention salient features.
- 90. Define disaster. Mention types & write in detail about disaster management.
- 10. Define insecticide. Classify insecticides & add a note on insecticide resistance.

# M.D. DEGREE EXAMINATION – OCTOBER, 2013 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Aripiprazole.
- 83. Role of culture in psychiatry.
- 84. Evaluation of patients with attempted suicide.
- 85. Token economy.
- 86. Post concussion syndrome.
- 87. Conversion Disorders.
- 88. Biofeedback.
- 89. Catatonic Schizophrenia.
- 90. Jacobson's progressive muscle Relaxation.
- 10. Cannabis dependence.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 BIOCHEMISTRY

Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Why vitamin K is called antihemorrhagic factor?
- 83. Vitamin D is classified as hormone. Explain.
- 84. Describe biochemical role of anti-oxidant vitamins.
- 85. Enumerate five enzymes which require zinc for their catalytic activity.
- 86. Phosphatidylinositol as a second messenger for hormone action.
- 87. Explain why folate and Vitamin  $B_{12}$  deficiency leads to megaloblastic anaemia.
- 88. Insulin receptor.
- 89. Biochemical changes in Kwashiorkor and Marasmus.
- 90. Two functions and two deficiency manifestations of Copper and Iodine.
- 91. Three biochemical functions of androgens and estrogens.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

91. Mecasermin.
92. Ulipristal.
93. Drugs effective against methicillin resistant staphylococcus aureus.
94. Sargramostim.
95. Streptogramins.
96. Respiratory fluoroquinolones.
97. GP IIb/IIIa receptor antagonists.
98. Entecavir.
99. Tigecycline.
100. Designer insulins.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Errors in interpretation of gunshot wounds.
- 83. Autopsy limitations in decomposed bodies.
- 84. "Diagnosis of drowning death is by exclusion" explain.
- 85. Paradoxical undressing.
- 86. Define sexual perversions and the sections involved with the same.
- 87. Autopsy limitations in blast injuries.
- 88. Centre coup injuries.
- 89. Electrical injuries.
- 90. Evidence of live birth.
- 10. Errors in diagnosis of "rape".

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Brown sequard syndrome.
- 92. Audiometry.
- 93. Cardio respiratory changes on ascent to high altitude.
- 94. Physiological basis of sleep.
- 95. Predictive functions of cerebellum and vestibular system.
- 96. Discuss in detail about the neurophysiology of pain.
- 97. Lung compliance and methods of measuring of lung compliance.
- 98. Discuss the pathophysiology of circulatory shock.
- 99. Periodic breathing.
- 10. Pathophysiology of Glaucoma.

## M.D. DEGREE EXAMINATION – OCTOBER, 2013 RADIOTHERAPY

Paper-III: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 20. Discuss total skin electron beam therapy for curative management of cutaneous T cell lymphoma
- 21. Discuss the management of desmoids tumour with post op positive margins. Add a note on the role of endocrine therapy.
- 22. Discuss the management of locally advanced carcinoma larynx in a patient who underwent emergency tracheostomy to relieve airway obstruction.
- 23. Discuss the management of squamous cell carcinoma of anal canal
- 24. Describe the pathological classification of uterine malignancies. Discuss the post op management of poorly differentiated endometrial Adeno carcinoma stage IB
- 25. Discuss the post op management of a child with standard risk medulloblastoma.
- 26. Discuss the management of stage IIBX Diffuse Large B Cell Lymphoma.
- 27. Discuss the management of carcinoma urinary bladder T2b NO MO
- 28. Discuss the management of newly diagnosed prostate cancer with bone metastases.
- 29. Describe the management of a 40 year old premenopausal lady with newly diagnosed carcinoma left breast cT4N1MO.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

management of Wilms' Tumour.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

101.	Discuss colostomy.
102.	Classify intestinal obstruction.
Describe pathology, clinical features and management.	
103.	Describe urinary diversion.
104.	Hypospadias.
105.	Discuss imperfect descend of
Testis.	
106.	Discuss Organ transplant.
107.	Discuss hyperparathyroidism and its
management.	
108.	Discuss Carcinoma of stomach.
109.	Discuss biliary fistula.
110.	Discuss the clinical features and

# M.S. DEGREE EXAMINATION – OCTOBER, 2013 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Osteogenesis Imperfecta.
- 83. Osteogenic sarcoma.
- 84. Magnetic resonance imaging.
- 85. Complications of an amputation stump.
- 86. Developmental dysplasia of Hip.
- 87. Charnley compression arthrodesis.
- 88. Tendon transfers for claw hand.
- 89. Distraction histiogenesis.
- 90. Osteoarthrosis knee.
- 10. Exostosis.

## M.S. DEGREE EXAMINATION – OCTOBER, 2013 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 85. Blow out fracture.
- 86. Preservation of donor cornea.
- 87. Roth's spot in retina
- 88. Ischaemic optic neuropathy
- 89. Describe various type of hemianopia and their significant intracranial lesion.
- 90. Epiretinal membrane.
- 91. Management of retained foreign body.
- 92. Cavernous sinus thrombosis.
- 93. Orbital Cellulitis.
- 94. Ocular burns.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Discuss the management of laryngotracheal trauma following a road traffic accident.
- 83. Prevention of nasal allergy.
- 84. Causes and management of sudden sensori-neural hearing loss.
- 85. Complications of radiotherapy for head and neck cancer.
- 86. Clinical features and management of oral sub-mucous fibrosis.
- 87. Causes of pre-lingual deafness and its management.
- 88. Clinical features and management of rhinosporidiosis.
- 89. Evaluation of chronic hoarseness in a 50 year old male.
- 90. Clinical manifestations of nasopharyngeal carcinoma.
- 10. ENT causes of proptosis.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 82. Histology of ovary.
- 83. Cell membrane and its specializations.
- 84. Fixatives.
- 85. Autosomal Dominant inheritance.
- 86. M.R.I. (Magnetic Resonance Imaging).
- 87. Plastination.
- 88. Preparation for sectional anatomy museum.
- 89. Lyon's Hypothesis.
- 90. Karyotype method.
- 10. Chromatin.

# M.D. DEGREE EXAMINATION – OCTOBER, 2013 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Control of STD.
- 92. Newer drugs for leprosy
- 93. Bowenoid papulosis
- 94. Lepra Bonita
- 95. Clue cells
- 96. Lazarine Leprosy
- 97. Zoon's Balanitis
- 98. Nine banded armadillo
- 99. RPR test
- 10. Soft sore

# M.D. DEGREE EXAMINATION – OCTOBER, 2013 HOSPITAL ADMINISTRATION

#### Paper-III – Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Hospital as a matrix organization.
- 92. Nursing problems in hospital.
- 93. Medical Insurance.
- 94. Hospital Hazards and Fire Safety.
- 95. Bio-Medical Waste Management and Handling Rules, 2011.
- 96. BARC guidelines relevant to Hospitals.
- 97. Managerial issues in Nuclear, Biological and Chemical (NBC) warfare casualties.
- 98. Hospital utilization Indices.
- 99. Hospital space module and engineering grid.
- 10. Permissions and Licenses required before commissioning a new hospital.

# M.D. DEGREE EXAMINATION – OCTOBER, 2013 GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. How to tackle the problem of Multidrug resistant Tuberculosis?
- 47. Hemotoxic snake bites in India, its management
- 48. Diagnosis and Management of Kala Azar
- 49. How to tackle the Dengue epidemics?
- 50. Large bowel diarrheas diagnosis and management
- 51.B<sub>12</sub> deficiency in India, its diagnosis and management
- 52. Falciparum malaria in India; diagnosis and how to tackle the problem?
- 53. Sickle cell crisis & The problem of Haemoglobinopathies in India
- 54. The problem of Vitamin D deficiency in India
- 55. Health needs and the challenges in India

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Management of cardiovascular disease. NYHA grade III at 28 weeks of gestation.
- 47. Post exposure prophylaxis.
- 48. Screening for APA syndrome.
- 49. Effects of malaria on pregnancy.
- 50. Jaundice in pregnancy causes and diagnosis.
- 51. Therapeutic conization.
- 52. Extrafascial hysterectomy-indications and procedure.
- 53. Discuss the current status of hormone replacement therapy.
- 54. Chemotherapy for choriocarcinoma.
- 10. Vaginoplasty indications and procedure.

### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PAEDIATRICS

#### Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe briefly pathogenesis, clinical presentations, diagnosis & treatment of wilson's disease.
- Describe briefly the biochemical changes & management of DKA
- 3. Outline the Duke criteria for diagnosis of bacterial endocarditis. Discuss its application in clinical setting.
- 4. Discuss the pathophysiology of septic shock. Describe the international consensus definition for pediatric sepsis.
- Define persistent & chronic diarrhea. Enumerate causes of chronic diarrhea in children. Discuss nutritional management of persistent diarrhea.
- 6. Enumerate causes of thyromegaly in children & classify thyroid size into different stages clinically. How would you approach to diagnose a case of goitre? Briefly write treatment of physiological goitre.
- 7. Discuss indications, rational & sources for stem cell transplantation in children.
- 8. Write a note on congenital hydrocephalous.
- 9. Prognostic factors in acute lymphoblastic leukemia.
- 10. Write a note on Clinical & laboratory features of Kawasaki disease.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 47. Discuss the anaesthetic management of 50 years old man having obstructive jaundice posted for Laparotomy.
- 48. Discuss the management of venous air embolism under general anaesthesia.
- 49. Describe the anaesthetic management of a 4 years old child posted for surgery of penetrating eye injury.
- 50. Mention the principles of management of common acid base disorders.
- 51. Discuss the management of a tetanus patient in intensive care unit.
- 52. Write a note on local anaesthetic toxicity.
- 53. What are the anaesthetic problems in a case of pheochromocytoma?
- 54. Describe Venturi principle and its application in anaesthesia practice.
- 55. Discuss the management of status asthmaticus.
- 56. Write a note on Jugular Venous Oxygen Saturation (SJVO<sub>2</sub>)

## M.D. DEGREE EXAMINATION – OCTOBER, 2013 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Describe the Pap Net system.
- 47. Discuss cytogenetics in Hematological neoplasms.
- 48. Describe the new diagnostic systems of Human papilloma Virus.
- 49. What is the role of Proteomics in diagnosis of various diseases?
- 50. Comment on BRACA-1 and its role in breast cancer.
- 51. Discuss utility of fluorescent probes in Pathology.
- 52. Discuss Stem cell banking.
- 53. Describe metabolic syndrome.
- 54. Describe new diagnostic techniques in pathology.
- 10. Discuss principles, lab methods and interpretation of DNA fingerprinting.

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#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 39. Discuss the role of MRI in evaluation of congenital heart disease.
- 40. Discuss the role of interventional radiology in management of Obstructive jaundice.
- 41. Enumerate various radio-isotopes used in Hepato-Biliary system. Describe the imaging features and techniques in biliary atresia.
- 42. What is chemical shift imaging? Elaborate the different types of chemical shift imaging used in MR system.
- 43. Describe the role of PET-CT in evaluation of Lymphoma.
- 44. Describe the approach to imaging in pulmonary afflictions of Acquired Immune Deficiency Syndrome (AIDS).
- 45. Enumerate the various Cerebello-pontine (CP) angle masses and discuss their imaging features.
- 46. Discuss the role of Doppler ultrasound in evaluation Peripheral Arterial Disease in the lower limb.
- 47. What are the reconstruction algorithms used in Computed tomography and explain them.
- 48. Discuss the role of Elastography in various organs of the body.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Bullous diseases of the lung.
- 47. Treatment of Small cell lung carcinoma.
- 48. Hospital acquired pneumonia.
- 49. Role of physiotherapy and pulmonary rehabilitation in COPD.
- 50. Oxygen therapy.
- 51. Single lung ventilation.
- 52. Current epidemiological situation of tuberculosis in India.
- 53. Mediastinoscopy.
- 54. Atypical mycobacteria (Non tubercular mycobacteria).
- 10. Role of surgery in pulmonary tuberculosis.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Give an account of vaccines against influenza virus.
- 47. Write an essay on Leprosy vaccines.
- 48. Give an account of change in life styles, food habits and emergence of parasitic diseases.
- 49. Write an essay on Bird-Flu.
- 50. Write an essay on Nosocomial infections.
- 51. Discuss the epidemiology and laboratory diagnosis of Japanese encephalitis in India. Add a note on preventive strategy of the condition.
- 52. Discuss vancomycin intermediate resistant Staphylococcus aureus (VISA) in detail.
- 53. Give an account of complement in health and disease.
- 54. Give an account of pulse polio immunization programme.
- 10. Discuss the recent methods in laboratory diagnosis of HIV.

### M.D. DEGREE EXAMINATION – OCTOBER, 2013 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 49. Write in detail about health information system in India with special reference to application of information system to public health. Add a note on e-waste.
- 50. Discuss the influence of Srivastav committee in the development of present health care system in India.
- 51. Discuss communication in health with special reference to its application in improving the health status of the community.
- 52. Define felt need. Discuss in detail about health planning in India.
- 53. Mention differences between health management & health administration write in detail about management methods & techniques.
- 54. Discuss health system in India in the light of globalization, industrialization & urbanization.
- 55. Write in detail about universal health coverage.
- 56. Describe how health care providers can play a significant role in reducing violence against women.
- 57. Discuss evaluation with reference to evaluating national family welfare programme.
- 58. Describe effects of stress on health & methods to manage stress.

#### M.D. DEGREE EXAMINATION - OCTOBER, 2013

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Pearson's Correlation Coefficient.
- 47. Illness behaviour.
- 48. Internet addiction.
- 49. Evidence Based Psychiatry.
- 50. Pervasive Developmental Disorder.
- 51. Biological treatment of sexual dysfunction.
- 52. Mental Retardation.
- 53. Rett's Disorder.
- 54. Atomoxetine.
- 10. Early parental deprivation.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. What is HbA<sub>1</sub>C? Give its clinical importance.
- 2. Define clearance. How it is estimated? What is its diagnostic importance?
- 3. ADA criteria of diagnosis of Diabetes Mellitus.
- 4. Reproducibility, accuracy and precision.
- 5. National Cholesterol Education Programme criteria for diagnosis of lipoprotein disorders.
- 6. Clinical interpretation of ALP and ALT with respect to liver function.
- 7. Describe two tests to estimate increased risk of cardiovascular disease.
- 8. What is renal clearance? How Creatinine clearance is superior to urea clearance?
- 9. What is metabolic acidosis? Name two pathological conditions which lead to metabolic acidosis.
- 10. Five therapeutic applications of radioisotopes.

#### M.D. DEGREE EXAMINATION - OCTOBER, 2013

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Drug use in pregnancy.
- 47. Ovulation inducing agents.
- 48. Drug therapy of hepatic amoebiasis.
- 49. Drug therapy of hirsutism.
- 50. Levamisole.
- 51. Use of monoclonal antibodies in cancer therapy.
- 52. Role of gonadotropin releasing hormone agonists in endometriosis.
- 53. Rational and management of deep vein thrombosis.
- 54. Principles of antimicrobial combination.
- 10. Cinacalcet.

## M.D. DEGREE EXAMINATION – OCTOBER, 2013 FORENSIC MEDICINE

## Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Glycosides.
- 92. Botulism.
- 93. Neutron Activation analysis.
- 94. Ethical issues in human stem cell research.
- 95. Ophitoxemia.
- 96. Scientific methods of interrogation.
- 97. Relevance of Bolam test.
- 98. Pre-implantation Genetic Diagnosis.
- 99. Should IPC 377 be scrapped? Explain your perceptions.
- 10. Red Cross Emblem.

### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Abnormalities of micturition.
- 47. Thalamic syndrome.
- 48. Describe clinical features of tetany.
- 49. Parkinson's disease.
- 50. Explain the basis of Poiseuille Flagon formula
- 51. What is behavioural thermo regulation? Give examples.
- 52. Cystometrogram.
- 53. Briefly describe the contributions of Pavlov in understanding physiological principles.
- 54. Discuss the changes EEG pattern during transdental meditation.
- 55. Explain the mechanism of hormones acting on blood sugar homeostasis.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### RADIOTHERAPY

Paper-IV: Clinical subjects in relation to Radiotherapy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 19. Write on screening for cervical carcinoma.
- 20. Discuss briefly about accelerated partial breast irradiation
- 21. Discuss about the Prognostic and Predictive markers in breast cancer.
- 22. Discuss the role of hyperthermia in cancer management.
- 23. Write short note on the methodology of randomized controlled trials.
- 24. Write a short note on adaptive radiotherapy
- 25. Discuss the bladder and rectal toxicities and the management of rectal toxicities in patients undergoing concurrent chemo-RT for carcinoma cervix.
- 26. Describe the management of limited stage Small cell Lung cancer
- 27. Discuss the construction of a medical linear accelerator.
- 28. Write a short note on dynamic multi leaf collimator and its utility in delivering IMRT.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 GENERAL SURGERY

Paper-IV: General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 48. Describe the aetiology, pathology, clinical features and management of Acute Pancreatitis.
- 49. Discuss complications of acid peptic disease.
- 50. Discuss Neoplasmas of the kidney.
- 51. Discuss Carcinoma of the Bronchus.
- 52. Discuss the merits and demerits of different operative procedures for prolapse of the rectum.
- 53. Recent trends in Bariatric Surgery.
- 54. Discuss Tumours of the adrenal gland.
- 55. Discuss Neoplasms of Salivary gland.
- 56. Stapler in Surgery.
- 57. Lower Intestinal Endoscopy.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. High density polyethylene.
- 47. Bio-absorbable implants.
- 48. Shoulder Arthroscopy.
- 49. Nerve conduction studies.
- 50. Adjuant chemotherapy in osteogenic sarcoma.
- 51. Indications and procedure of total hip replacement arthroplasty.
- 52. Interference screw.
- 53. Recent advances in ACL reconstruction.
- 54. Silastic prostheses.
- 10. Core decompression in avascular necrosis of femoral head.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2013 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 49. Master IOL.
- 50. Phakonit
- 51. Recent advances in the treatment of Dry Eye.
- 52. Orbscan.
- 53. Laser treatment for macular lesion.
- 54. Multifocal ERG.
- 55. Magnetic resonance angiography.
- 56. Recent trend in management of Lagophthalmos.
- 57. Deep anterior lamellar keratoplasty.
- 10. Recent management of uniocular cataract in 5 year old child.

#### 183-NR M.S. DEGREE EXAMINATION – OCTOBER, 2013 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Discuss the surgical technique of total maxillectomy.
- 47. Speech therapy for stuttering.
- 48. Complications of radical neck dissection.
- 49. Posterior tympanotomy: Indications and technique.
- 50. Ossiculoplasty.
- 51. Post-tonsillectomy hemorrhage.
- 52. Endoscopic spheno-palatine artery clipping.
- 53. Management of Citelli's abscess.
- 54. Digital Subtraction Angiography for nasopharyngeal angiofibroma.
- 10. Role of KTP-532 laser in ENT.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- **51.** Lentiform nucleus.
- **52.** Auditory pathway from organ of corti.
- **53.** Draw and label the structures of transverse section at inferior colliculus level of mid brain.
- **54.** Typical spinal nerve.
- **55.** Blood brain barrier.
- **56.** Spermatogenesis.
- **57.** Derivatives of pharyngeal pouches.
- **58.** Neural Crest and its derivatives
- **59.** Foetal circulation.
- **60.** In vitro fertilization.

#### M.D. DEGREE EXAMINATION - OCTOBER, 2013

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 46. Cutaneous calcification.
- 47. Skin manifestations of amyloidosis.
- 48. Ecthyma gangrenosum.
- 49. Side effects of systemic steroids and their prevention.
- 50. Scleromyxedema.
- 51. Necrobiosis lipoidica diabeticorum.
- 52. Cutaneous changes in peripheral vascular diseases.
- 53. Kawasaki syndrome.
- 54. Erythema elevatum diutinum.
- 10. Urticarial vasculitis.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2013

#### HOSPITAL ADMINISTRATION

Paper-IV – Administration of Clinical and Non-Clinical Services and Administrative procedures

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

100. Accident and Emergency Services:

Administrative Issues and Challenges.

101. Intensive Care Unit – Planning

considerations.

102. Day Care Units: Planning Premises

and Design Principles.

103. Geriatric Services in Hospitals:

Future Trends.

104. Medical Superintendent's rounds

checklist.

105. Blood Bank and Transfusion

Services.

106. Medical Audit.

107.

Strategic Planning and Selection of

Hospital Equipment.

108.

Enterprise Resource Planning in

hospitals.

10. Marketing of Hospitals: A skill or an art?

- - -

100-NR

#### M.D. DEGREE EXAMINATION – APRIL, 2014

# GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Enumerate pathophysiology and management of pain.
- 2. Discuss thermoregulation of the body. Outline the various causes of hyperthermia syndrome.
- 3. Prions.
- 4. Parenteral nutrition therapy.
- 5. Anti oxidants.
- 6. Coronary circulation.
- 7. Hyponatraemia.

- 8. High anion-gap acidosis.
- 9. Hirsutism.
- 10. Role of complement in immunity.

# M.S. DEGREE EXAMINATION - APRIL, 2014

# OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the blood supply to pelvic organs.
- 2. Foetal circulation.
- 3. Physiology of lactation.
- 4. Discuss haemorrhagic shock.
- 5. Tuberculous Salpingitis.
- 6. Write short notes on:
  - a) Magnesium sulphate
  - b) Danazol
- 7. Vaginal Infections.
- 8. Discuss the role of Folic Acid in pregnancy.
- 9. Amniocentesis.
- 10. Write short notes on:
  - a) Prostaglandin-E
  - b) Heparin

#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the pathophysiology of cold stress in neonates.
- 2. Describe the physiology of lactation and management of not enough milk in breast feeding.
- 3. Describe the indicators of Iron deficiency anemia and their interpretation.
- 4. Classify the causes of hyponatremia in children and describe its management.
- 5. Describe the interpretation of acid base disturbances.
- 6. Describe the pathogenesis of necrotizing enterocolitis.
- 7. Describe the mechanism of action of drugs used to treat hypertension in children.
- 8. Describe the pathophysiology and prevention of intra ventricular haemorrhage in neonates.
- 9. Describe the aetiology and pathophysiology of apnoea in neonates.
- 10. Describe the pathophysiology of septic shock in infants.

# M.D. DEGREE EXAMINATION – APRIL, 2014 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the anatomy of the Epidural space. Discuss the physiological effects of Epidural anaesthesia.
- 2. Write a note on William Thomas Green Morton.
- 3. Write the importance of Serum electrolytes in Anaesthesia practices.
- 4. Second gas effect.
- 5. Write a note in VENTURI principle and its applications in anaesthetic practice.
- 6. Describe how you would differentiate, different types of Neuro muscular blockade.
- 7. Write a note on central venous pressure and its importance.
- 8. Explain various methods of sterilization of anaesthetic equipments.
- 9. Describe the safety devices in anaesthesia machines.
- 10. Classify the diuretic agents according to the site of action. Enumerate the complications of diuretic therapy.

# M.D. DEGREE EXAMINATION – APRIL, 2014

#### **PATHOLOGY**

# Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

104. 105.	Pathology of cellular ageing. Role of extra cellular matrix in health and disease.
106.	Genomic imprinting.
107.	Chemokines.
108. 109.	Mononuclear phagocytic system. Oncogenes.
110.	Describe cytoskeleton abnormalities.
111.	Delayed radiation injury.
112.	Endotoxic shock.
113.	Role of arachidonic acid metabolites in pathophysiology.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 RADIO DIAGNOSIS Paper-I – Basic Sciences

Max. Marks: 100

Note: Answer all questions

Time: 3 Hours

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 94. Discuss the principle of acoustics applicable to ultrasound imaging. Describe in brief the construction of transducers used in real time ultrasound. Discuss in brief the various ultrasonography controls.
- 95. Discuss the CT anatomy of the temporal bone.
- 96. Write short notes on:
  - a) ALARA
  - b) Compton effect
  - c) Superior orbital fissure
  - d) MR myelography
  - e) HALF value layer
- 97. Enumerate factors affecting radiographic image quality. How will you improve radiographic image quality?
- 98. What are the properties of X-rays? Discuss the biological effects of radiation.
- 99. Classify intravenous contrast media. What are the advantages of newer generation of contrast media? Discuss their adverse reactions.
- 100. Discuss the cross sectional anatomy of neck spaces.
- 101. Write short notes on:
  - a) Focal spot of X-ray tube
  - b) Co<sub>2</sub> Angiography
  - c) Anode Heel effect
  - d) High KV technique in chest X-ray
  - e) Time Gain Compensation (TGC) and dynamic range in ultrasound
- 102. Discuss the imaging anatomy of the knee joint.
- 103. What is maximum permissible dose? Describe the methods of radiation protection to the patient and staff in diagnostic radiology.

# M.D. DEGREE EXAMINATION – APRIL, 2014 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Tracheal bronchus.
- 2) Secondary pulmonary lobule
- 3) Ventilation-Perfusion imbalance
- 4) Equal pressure point
- 5) Respiratory acidosis
- 6) Mycobacterium growth indicator tube
- 7) Pneumocystis jiroveci
- 8) Usual interstitial pneumonia
- 9) Emphysema-pathologic changes in the lung
- 10) Indacaterol

#### M.D. DEGREE EXAMINATION – APRIL, 2014 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

100. T-cell subsets.

101. Gas-plasma sterilization.

102. Enumerate various bacteriocin

typing methods of bacteria. Describe briefly pyocin typing methods in Pseudomonas aeruginosa.

103. Discuss the basic principles of

Polymerase Chain Reaction.

104. Role of hospital environment

surveillance in control of health care associated infections.

105. High end disinfectants.

106. Bacterial endotoxin structure and it's role in pathophysiology of disease.

107. Discuss chemokines and their role

in health and disease.

108. Discuss various strategies

developed by bacteria for evading the host immune response.

 Discuss flexible genetic exchange systems in evolution of bacterial virulence. - - -

136-NR

#### M.D. DEGREE EXAMINATION – APRIL, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss Community diagnosis and treatment with an example.
- 2) Undertake a critical analysis of NRHM at the district level.
- 3) Define food and nutrition security. What are the factors determining food security. Write a critique on the food security bill 2013.
- 4) Enumerate the responsibilities of ASHA. How will you monitor and evaluate their work.
- 5) As MO i/c of PHC, plan an IEC campaign in the villages. How will you evaluate its effectiveness?
- 6) Describe the role of 5-year plans in improving the health status in India.
- 7) Write a note on the physical parameters and inorganic constituents for safe drinking water.
- 8) As the Medical Officer in charge of a PHC, draw out a plan for safe waste and sewage disposal in your villages.
- 9) Explain the concept of Positive Health.
- 10) Elaborate on the Morbidity indicators of health.

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# M.D. DEGREE EXAMINATION – APRIL, 2014 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Theory of Imprinting.
- 2) Gerstmann's Syndrome.
- 3) Apraxia.
- 4) PET.
- 5) Bioavailability.
- 6) Attachment.
- 7) Observational Learning.
- 8) EEG.
- 9) Five Factor Theory of personality.
- 10) Electra complex.

# M.D. DEGREE EXAMINATION – APRIL, 2014 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Principle of RIA giving two advantages and two disadvantages.
- 2) What is Westgrad Multirule chart? How are various rules used?
- 3) Five factors affecting electrophoresis.
- 4) Chemiluminescence liminometer.
- 5) Paper electrophoresis.
- 6) Denaturation of proteins.
- 7) Oxidative Phosphorylation and its uncouplers.
- 8) Automated urine analysis.
- 9) Factors affecting enzyme activity.
- 10) Ion channels in biological cell membrane.

# M.D. DEGREE EXAMINATION - APRIL, 2014

#### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

100.	Gastrointestinal Therapeutic system			
101.	Institutional Ethical Committee, its			
composition and role.				
102.	Screening for a new drug molecule			
for its effects on intestinal motility.				
103.	P drug concept.			
104.	Immunoassays.			
105.	G-proteins.			
106.	Phase II clinical trials.			
107.	Therapeutic window.			
108.	Sampling and its various types.			
10. Volume of distribution and its clinical signature.				

#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe diffuse axonal injury.
- 2) Discuss the blood groups and its forensic application.
- 3) Describe anatomy of blood supply of heart and its significance in sudden death.
- 4) Describe the development of tooth. Discuss medico legal importance of teeth.
- 5) Discuss the process of ossification.
- 6) Describe polymerase chain reaction.
- 7) Describe in brief various immunological tests for pregnancy.
- 8) Describe injuries caused due to cold.
- 9) Describe the immediate causes of death from wounds.
- 10) Discuss medico legal importance of blood transfusion.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

Draw diagrams wherever necessary All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Intercellular junctions.
- 2) Role of vesicular transport proteins in vesicular transport.
- 3) Mechanisms of apoptosis.
- 4) Mechanism of active transports, add a note on action of cardiac glycosides on it.
- 5) Formation and functions of lymph.
- 6) Electrotonic potentials.
- 7) Molecular basis of smooth muscle contraction.
- 8) Sarcotubular system.
- 9) Refractory period in skeletal and cardiac muscle.
- 10) Denervation hypersensitivity.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **RADIOTHERAPY**

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- What are the different interactions of radiation with matter?
   Describe in detail the Compton effect.
- 2) Write in brief on different techniques of hyperthermia for treating cancers. Explain how hyperthermia can complement photon beam treatment.
- 3) Describe the anatomy and lymphatic drainage of nasopharynx. What are the signs and symptoms of nasopharyngeal cancers?
- 4) Write the staging of lung cancer. Write in brief on the prognostic factors on non-small cell lung cancer.
- 5) Pathological classification of bone tumours.
- 6) What are the acute radiation syndromes? Describe cerebrovascular syndrome in detail.
- 7) Write a brief note on mammography.
- 8) What is meant by dose-volume-histogram? What are the different types of DVH? Write the advantages and disadvantages of DVH.
- 9) Kaplan meir survival curve.
- 10) Describe the mammalian cell survival curve. What are the advantages and disadvantages of the LQ model?

# M.S. DEGREE EXAMINATION – APRIL, 2014 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Anatomy of rectum and anus
- 2) Spaces of hand
- 3) Synthesis of thyroid hormones
- 4) Parathormone
- 5) Pathology of intestinal tuberculosis
- 6) Wound healing
- 7) Microbiology and toxins of gas gangrene
- 8) Investigations of hydatid disease
- 9) Drug therapies in hyperthyroidism
- 10) Describe micturition reflex and formation of calculi

# M.S. DEGREE EXAMINATION – APRIL, 2014

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Bio-mechanics of normal gait.
- 2) Acromio clavicular joint.
- 3) Blood supply of femoral head.
- 4) Different modes of crutch gait.
- 5) Gout.
- 6) Bone transport.
- 7) Sach foot.
- 8) PCR test in Tuberculosis.
- 9) Ellis-van-Creveld syndrome.
- 10) Role of embolization in Orthopaedics.

#### M.S. DEGREE EXAMINATION - APRIL, 2014

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Dark adaptation.
- 2) Applied anatomy of orbital apex.
- 3) Ocular effects of methyl alcohol poisoning.
- 4) Pathology of sympathetic ophthalmitis.
- 5) Toxoplasma.
- 6) Genetics of color blindness.
- 7) Isoniazid toxicity.
- 8) Fundus fluorescein angiography.
- 9) Rose Bengal dye.
- 10) Prostaglandins in glaucoma.

# M.S. DEGREE EXAMINATION - APRIL, 2014

#### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Applied anatomy of intra-temporal course of facial nerve.
- 2) Physiology of olfaction.
- 3) Compartments of larynx.
- 4) Cristae.
- 5) Decibel.
- 6) Local anesthesia for cortical mastoidectomy.
- 7) Development of thyroid gland.
- 8) Fusiform bacillus.
- 9) Cell cycle and its significance in cancer chemotherapy.
- 10) Oncological classification of cervical lymph nodes.

#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Embryological basis of Tetralogy of Fallot.
- 2) Peritoneal reflections of Liver and its bare areas.
- 3) Positions of Appendix.
- 4) Varicocoele.
- 5) Applied anatomy of Prostate.
- 6) Anatomical Snuff Box.
- 7) Surgical anatomy of Adductor Canal and its applied importance.
- 8) Blood supply of face. Add a note on a dangerous area of face.
- 9) Muscles of Pharynx. Add a note on its applied aspect.
- 10) Claw hand.

#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### D.V.L.

# Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Anatomy of female genital system.
- 2) Immunology of leprosy.
- 3) Keratinization of skin.
- 4) Normal skin defenses against micro-organisms.
- 5) Dermal Ground substance.
- 6) Stages of normal wound healing.
- 7) Embryology of skin.
- 8) Lymphatic drainage of male genitalia.
- 9) Normal lipid metabolism.
- 10) Immunofluorescence in dermatology.

# M.D. DEGREE EXAMINATION – APRIL, 2014 HOSPITAL ADMINISTRATION

Paper-I – General Administration and Management in Hospital field

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Principles of management as applicable to Hospital Management.
- 2) JOHARI Window and its utility in Hospital Administration.
- 3) Human factors in decision making.
- Managing to achieve job satisfaction amongst various groups of employees in hospitals.
- 5) Need Hierarchy Theory of Motivation as applied to Hospital employees.
- 6) Hospital as a Matrix organization.
- 7) HRD Challenges in Hospitals.
- 8) Techniques of selective Inventory Control. Illustrate any one.
- 9) Break Even Analysis and applications in hospitals.
- 10) CPM vs PERT as technique of Hospital Project Management.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 EMERGENCY MEDICINE

Paper-I – Basic Sciences as relevant to Emergency Medicine (Applied Anatomy; Clinical Physiology; Clinical Biochemistry; Clinical Pharmacology; Clinical Microbiology; Clinical Pathology; Research Methodology; Biostatistics)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the applied anatomy of the liver and portal circulation with emphasis on portosystemic anastomosis. Draw a neat labeled diagram.
- 2) Discuss the pharmacology of anti-arrhythmic drugs.
- 3) Write the basic anatomy and physiology of the adrenal gland and enumerate the clinical features of adrenal crisis.
- 4) Discuss the physiological changes in various organ systems in normal pregnancy.
- 5) Describe the pathophysiology of acute coronary syndrome and the correlation with ECG changes and cardiac enzymes.
- Definition of randomized controlled trial and methods used for conducting it.
- 7) Causes, clinical features and diagnosis of acute and chronic respiratory acidosis.
- 8) Discuss sensitivity and specificity.
- 9) Discuss pathophysiology of septic shock and immediate management in the emergency medicine department.
- 10) Toxicity and management of paracetamol overdose.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **GENERAL MEDICINE**

Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Clinical features and management of heart failure. Add a note on Framingham criteria for the diagnosis of congestive heart failure.
- 2) Infectious complications in solid organ transplant recipients.
- 3) Malabsorption syndrome.
- 4) Chagas disease.
- 5) Restrictive cardio myopathy
- 6) Chronic hepatitis-B infection.
- 7) Chron's disease.
- 8) Bioterrorism.
- 9) Non-cirrhotic portal hypertension.
- 10) Drug therapy in pulmonary hypertension.

#### M.S. DEGREE EXAMINATION – APRIL, 2014 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 65.23 year old Primigravida, admitted with H/o convulsions at 30 weeks of pregnancy. How will you evaluate and manage this patient?
- 66. Prediction and management of Pre term Labour.
- 67. Management and follow up of vesicular mole.
- 68. Maternal and foetal complications of diabetes mellitus in pregnancy.
- 69. Torch infections
- 70. Write short notes on:
  - a) Elderly Primigravida
  - b) Asynclitism
- 71. Management of labour in Twin Pregnancy.
- 72. Diagnosis and management of Intra uterine growth restriction.
- 73. Prolonged latent phase in labour.
- 74. Write short notes on:
  - a) Foetal Biophysical Profile
  - b) Neonatal convulsions

#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Describe the diagnosis and management of new born baby with diaphragmatic hernia.
- 12. Enumerate the causes and describe the management of cholestasis in neonates.
- 13. Describe resuscitation of a preterm neonate.
- 14. Describe the normal language milestones upto 5 years of age.
- 15. Describe the clinical features of disruptive behavioral disorders in toddlers.
- 16. Describe the composition, storage, benefits and adverse effects of Pentavalent vaccine.
- 17. Describe the prevention of varicella zoster infection in children.
- 18. Describe the pathogenesis and management of apnoea of prematurity.
- 19. Enumerate the causes of seizures in neonates and describe the management of hypoglycemic seizures.
- 20. Describe the diagnosis and treatment of obesity in children.

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# M.D. DEGREE EXAMINATION – APRIL, 2014

#### ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Discuss the role of anesthesiologists in Disaster management.
- 12. Write a note on liquid oxygen.
- 13. Mention various modalities of pain relief utilized for chronic pain.
- 14. Discuss the management of a patient with cobra bite.
- 15. Compare the merits and demerits of regional and general anaesthesia in TURP (Trans Urethral Resection of Prostrate).
- 16. Write the recent advances in measurement of depth of anaesthesia
- 17. Explain the hazards of laser surgery and add a note on protective measures.
- 18. Describe the various devices used for oxygen therapy.
- 19. Write a note on the uses of TRANS OESOPHAGEAL ECHO CARDIOGRAPHY in anaesthesia practice.
- 20. Write a note on SUGAMMADEX.

# M.D. DEGREE EXAMINATION – APRIL, 2014 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Sudden infant death syndrome.
- 65. Causes and mechanisms in common congenital malformations.
- 66. Kawasaki syndrome.
- 67. Hereditary nephritis.
- 68. Lobular carcinoma of breast.
- 69. Keratoacanthoma.
- 70. Budd-Chiari syndrome.
- 71. Discuss non-infective endocarditis.
- 72. Aetio-pathology of rheumatoid arthritis.
- 10. Tuberous sclerosis.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 56. Discuss the role of a radiologist in management of jaundice in an adult patient.
- 57. Describe the mechanism and causes of lung collapse. Discuss the imaging features of various patterns of lung collapse.
- 58. Enumerate the causes of lower GIT bleed and discuss the role of Radiology in evaluation and management of lower GI bleed.
- 59. How as a Radiologist do you approach a suspected case of congenital heart disease? Discuss in detail various cyanotic congenital heart diseases
- 60. Discuss the differential diagnosis of an incidentally discovered breast lump and the different modes of investigation you will adopt to arrive at a provisional diagnosis.
- 61. Write short notes on:
  - a) BI-RADS
  - b)Thoracic manifestations of histocytosis
  - c) Secondary Hyperparathyroidism
  - d) Cystic adenomatoid malformations
  - e) Benign gastric tumors
- 62. Discuss the imaging of abdominal lymphoma.
- 63. Write short notes on:
  - a) Oesophageal atresia and tracheo-oesophageal fistula
  - b) Cystic lesions of the breast
  - c) Round atelectasis
  - d) Ultrasound imaging of appendicitis
  - e) Anomalies of aortic arch and its major branches
- 64. Describe the blood supply of the large and small intestine. Discuss the role of a radiologist in evaluation and management of a suspected case of bowel ischemia.
- 65. Discuss the role of a radiologist in management of a patient with vascular claudicating pain.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Tuberculous pericarditis
- 12) Tuberculin skin test
- 13) Fall and rise phenomenon
- 14) Paradoxical IRIS
- 15) Endobronchial tuberculosis
- 16) Silico tuberculosis
- 17) Programmatic management of MDR-TB
- 18) Clinical features and management of MAIC disease
- 19) Congenital tuberculosis
- 20) Lubeck disaster

# M.D. DEGREE EXAMINATION – APRIL, 2014 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. Briefly describe epidemiology of Rickettsial diseases in India. Add a note on recent methods of laboratory diagnosis of scrub typhus.
- 68. Write a note on etiology and laboratory diagnostic methods of nongonococcal urethritis.
- 69. MRSA surveillance in acute wards and its control.
- 70. Classify non-sporing anaerobes and their role in respiratory and abdominal infections.
- 71. Group B streptococci and its Pathogenicity.
- 72. Enumerate various food borne pathogens and outline their laboratory identification methods.
- 73. Outline various phenotypic and genotypic methods in laboratory diagnosis of Mycobacterium tuberculosis.
- 74. Enumerate Zoonotic bacterial diseases and outline their rapid identification methods.
- 75. Enumerate bacterial pathogens causing lower respiratory tract infections. Outline laboratory diagnosis of *H. influenzae*.
- 76. Give an account of pseudomembranous colitis and its lab diagnosis.

# M.D. DEGREE EXAMINATION – APRIL, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss the strategies for prevention of Mother to Child Transmission of HIV.
- 12) As the Municipal Health Officer, submit a plan for surveillance of drinking water in your town.
- 13) Plan a screening program for Diabetes mellitus in a village with a population of approximately 5000.
- 14) Critically appraise a cohort study.
- 15) Cases of a febrile illness has shown a sudden increase in villages under your PHC. Discuss how you will investigate and what measures will you take to control the outbreak?
- 16) Discuss the current situation of Vector Borne Diseases in India. Write a note on LLINs.
- 17) Polio eradication from India has been achieved. Analyse the reasons for this success. Name the countries where Polio is still existing.
- 18) Review the RNTCP since its inception.
- 19) Discuss the composition and role of Institutional Ethics Committee.
- 20) A study of HIV infection in women entering the Prison system classified 475 inmates with respect to history of intravenous drug use (IVDU) (user=136 and non-user=339). 61 of the users and 27 of the non-users were found to be HIV positive.
  - a) Calculate the prevalence of HIV in each exposure group.
  - b) Calculate the prevalence of HIV in each non exposure group
  - c) Calculate the prevalence ratio and Interpret your findings.

# M.D. DEGREE EXAMINATION -APRIL, 2014 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Psychiatric aspects of Wilson's Disease.
- 2) Neuropeptides.
- 3) Basal ganglia.
- 4) Multi Infarct Dementia.
- 5) Korsakoff Psychosis.
- 6) Rivastigmine.
- 7) HIV Dementia.
- 8) Nicotine Replacement Therapy.
- 9) Interictal Psychosis.
- 10) Cortical Blindness.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) What is substrate level Phosphorylation? Give one example.
- 12) Classification and characteristics of lipoproteins.
- 13) Pasteur effect.
- 14) Describe the biochemical basis and control of atherosclerosis.
- 15) Discuss biochemistry of ageing.
- 16) Describe by flow diagram the reactions of glycolysis giving names of enzymes involved.
- 17) Importance of SDA of food.
- 18) Digestion and absorption of lipids.
- 19) Metabolic changes after 24 hours of starvation.
- 20) Alcohol metabolism.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **PHARMACOLOGY**

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1.  $\beta$  receptor agonists and antagonists in the treatment of heart failure.
- 2. Reversible alpha receptor antagonists.
- 3. Cannabinoid receptors and drugs acting through them.
- 4. Pre-anaesthetic medication.
- 5. 5 HT1A receptor agonists.
- 6. Endogenous opioid analogues.
- 7. Malignant hyperthermia.
- 8. Cholinomimetic alkaloids.
- 9. Nitric Oxide.
- 10. a 2 (alpha 2) receptor agonists.

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#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Write briefly about blood transfusion hazard.
- Describe the pathophysiology of coronary occlusive disease and its medico legal importance.
- 13) Discuss fat embolism.
- 14) Describe the etiopathology of intracranial haemorrhage.
- 15) Write short note on vasovagal shock.
- 16) Discuss the pathology of crush syndrome.
- 17) Describe the methods of estimating age of wound.
- 18) Callus.
- 19) Write briefly serological tests for blood.
- 20) Medico legal importance of DNA fingerprinting.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Mechanism of humoral immunity.
- 2) Rh-system and its importance.
- 3) Composition and regulation of pancreatic secretion.
- 4) Movements of small intestine.
- 5) Enterohepatic circulation.
- 6) Tubuloglomerular feedback.
- 7) Counter-current mechanism.
- 8) Hypo and hyper secretion of thyroid hormones.
- 9) Role of cortisol in stress and inflammation.
- 10) Hormonal changes during menstrual cycle.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **RADIOTHERAPY**

Paper-II: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Write in brief on the evaluation and prognostic factors for brain tumours. Describe the role of radiotherapy in high grade gliomas.
- 12) What are the malignancies considered as AIDS defining diseases? Write in brief on Kaposi's sarcoma.
- 13) Medullary carcinoma of thyroid.
- 14) What is the role of radiotherapy in the treatment of esophageal cancer? Describe the technique of radiotherapy.
- 15) Chordoma.
- 16) What is meant by breast conservation therapy? What are the contraindications for BCT?
- 17) Pleomorphic adenoma.
- 18) Technique of external radiotherapy in treatment of cancer cervix.
- 19) Basal cell carcinoma.
- 20) Radiation proctitis.

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# M.S. DEGREE EXAMINATION – APRIL, 2014 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Define shock. Describe various types of shock and management of haemorrhagic shock.
- 2) Discuss early breast carcinoma.
- 3) Malignant salivary gland tumors.
- 4) Pathophysiology of burns and management of burns in the early stages.
- 5) Obstructive jaundice.
- 6) Classify bone tumors. Discuss osteosarcoma.
- 7) Splenic injury and management.
- 8) Avascular necrosis of neck of femur.
- 9) Classify diseases of thyroid. Write about Riedel's thyroiditis.
- 10) Describe about carcinoma Caecum.

# M.S. DEGREE EXAMINATION – APRIL, 2014 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Classify distal radial articular fractures and outline management.
- 12) Classify open injuries and outline management.
- 13) Discuss fracture healing.
- 14) Cruciate ligament injuries
- 15) Ape-thumb deformity.
- 16) Lisfranc's injuries of the foot.
- 17) Classify acetabular fracture and outline management.
- 18) Recurrent dislocation of the shoulder.
- 19) Atlanto axial injuries.
- 20) Bennett fracture dislocation.

# M.S. DEGREE EXAMINATION – APRIL, 2014 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Pseudophakic bullous keratopathy.
- 12) Management of senile ectropion.
- 13) Orbital dermoid.
- 14) Iridodialysis.
- 15) Blepharitis.
- 16) Phacomorphic glaucoma.
- 17) Surgical aphakia.
- 18) Recurrent pterygium.
- 19) Absolute glaucoma.
- 20) Multifocal intraocular lenses.

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#### 181-NR

# M.S. DEGREE EXAMINATION – APRIL, 2014 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss the clinical features and management of glomus jugulare tumor.
- 2) Prevention of Iatrogenic laryngo-tracheal stenosis.
- 3) Risk stratification for papillary carcinoma of the thyroid.
- 4) Routes of spread of juvenile nasopharyngeal angiofibroma.
- 5) Management of T1 glottic cancer.
- 6) In-vivo tests for nasal allergy.
- 7) Complications of parapharyngeal abscess.
- 8) Clinical features of cholesteatoma.
- 9) Collaural fistula.
- 10) Differential diagnosis for white patch on the tonsil.

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# M.D. DEGREE EXAMINATION – APRIL, 2014 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Interior of Right Atrium.
- 2) Gross Anatomy of second part of Duodenum.
- 3) Supports of Kidney and relations of posterior surface of left kidney.
- 4) Right Ureter.
- 5) Pudendal canal.
- 6) Axillary artery.
- 7) First Carpometacarpal Joint.
- 8) Maxillary air sinus.
- 9) Submandibular salivary gland.
- 10) Femoral artery and its branches.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### D.V.L.

#### Paper-II

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Clinical features and management of psoriatic arthritis.
- 12) Approach to a case of chronic leg ulcer.
- 13) Oral retinoids in dermatology.
- 14) Photochemotherapy.
- 15) Clinical types and management of leishmaniasis.
- 16) Mycetoma.
- 17) Graft-versus host disease.
- 18) Inherited Epidermolysis Bullosa.
- 19) Pustular eruptions of palms and soles.
- 20) Diffuse hypermelanosis.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) National rural Health Mission and its clinical appraisal.
- 2) Kartar Singh Committee.
- 3) National Blood Policy and its salient features.
- 4) Sensitivity vs specificity.
- 5) Epidemiology of Trauma and RTA (Road Traffic Accidents).
- 6) Physical Quality of Life Index.
- 7) Testing of Hypothesis in Health and Hospital Research.
- 8) Quality circles as applicable to Health Care.
- 9) How do you investigate a viral epidemic fever?
- 10) Health Information System in India and its critical appraisal.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 EMERGENCY MEDICINE

Paper-II – Emergency Medicine (Medicine, Dermatology, Psychiatry)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Clinical features, investigations and management of acute severe asthma.
- 12) Emergency presentation of acute kidney injury, immediate investigations and indications for dialysis.
- 13) How do you approach a case of syncope in the emergency department? List the relevant investigations and management.
- 14) Causes, clinical features and treatment of toxic epidermal necrolysis.
- 15) How do you approach a patient who has attempted suicide and evaluate suicide risk?
- 16) Discuss the clinical features, complications and management of haematotoxic snake envenomation.
- 17) Clinical features and treatment of alcohol withdrawal syndrome.
- 18) Approach to a patient with suspected meningitis including new guidelines for treatment.
- 19) Management of dog bite and rabies pre-and post-exposure prophylaxis.
- 20) Complications of transfusion of blood products.

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Clinical features and management of acute respiratory distress syndrome.
- 2. Etiology, clinical features and management of primary dementia diseases.
- 3. Reiter's disease.
- 4. Primary hyperparathyroidism.
- 5. Idiopathic pulmonary fibrosis.
- 6. Metabolic syndrome.
- 7. Management of supraventricular tachycardias.
- 8. Nutritional neurological disorders.
- 9. Non-invasive ventilation.
- 10. Autonomic neuropathy in diabetes mellitus.

# M.D. DEGREE EXAMINATION – APRIL, 2014 OBSTETRICS & GYNAECOLOGY Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 91. Discuss the aetiology and management of Post menopausal bleeding.
- 92. Management of ovulatory dysfunction.
- 93. Radiotherapy in carcinoma cervix.
- 94. Evaluation and management of Acute Pelvic Inflammatory Disease.
- 95. Surgical management of Stress Incontinence.
- 96. Write short notes on:
  - a)Asherman's syndrome
  - b)Dermoid cyst.
- 7. Role of Hormone Replacement Therapy.
- 8. Latest trends in contraception.
- 9. Endometriosis and Infertility.
- 10. Write short notes on:
  - a) Complete perineal tear
  - b) Turner's Syndrome

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#### M.D. DEGREE EXAMINATION – APRIL, 2014 PAEDIATRICS

# Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21. Describe the pathogenesis and pathology of tuberculous meningitis in children.
- 22. Describe how you would assess asthma control and adjust therapy in children?
- 23. Describe grading of severity of Dengue infection.
- 24. Describe the clinical features and treatment of severe malaria.
- 25. Describe prevention of mother to child transmission of HIV infection.
- 26. Describe feeding in a case of severe acute malnutrition.
- 27. Describe principles for initiation of complementary foods.
- 28. Describe the diagnosis and management of resistant rickets.
- 29. Describe the clinical features and management of measles and outline the prevention strategies.
- 30. Draw a diagnostic algorithm for pediatric pulmonary tuberculosis.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 95. Discuss anaesthetic management in a patient with rupture uterus posted for emergency surgery.
- 96. How will you manage the common post operative pulmonary complications?
- 97. Write a note on anaesthetic management for Laparoscopic tubal ligation.
- 98. Discuss the causes and treatment of various Cardiac Arrhythmias that may occur during anaesthesia.
- 99. Describe the commonly used induction techniques in children.
- 100. What are the occupational hazards faced by Anaesthesiologists?
- 101. Discuss the clinical criteria for diagnosis of Brain Death.
- Discuss the pre operative preparation of a patient posted for Lobectomy.
- 103. Write a note on monitored anaesthesia care.
- 104. Give an outline on selection and discharge criteria for day care surgery patients.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 95. Describe the lipid profile in health and disease.
- 96. FNAC of thyroid neoplasms.
- 97. Prognostic factors in acute leukemias.
- 98. Bone marrow transplantation.
- 99. Aetiopathology and laboratory diagnosis of chronic renal failure.

100. Myelofibrosis.

101. Laboratory diagnosis of diabetes

mellitus.

102. Idiopathic thrombocytopenic

purpura.

103. Pathophysiology of normal and

abnormal fibrinolysis.

104. Cerebrospinal fluid analysis in malignant disorders.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss the embryology and congenital anomalies of the urinary system. Discuss the role of imaging in their evaluation.
- 2) Discuss the differential diagnosis of an expanding lesion at the end of a long bone.
- 3) Enumerate renal masses in children. Describe in detail the radiological and imaging features of Wilm's tumour.
- 4) Discuss the imaging features and diagnosis of inherited white matter diseases (Leukodystrophies).
- 5) Describe ultrasound features of first trimester pregnancy. Enumerate the causes of bleeding in first trimester and discuss their imaging features.
- 6) Enumerate major apertures of skull base and discuss their location, transmitted structures through them and their connects. Describe the imaging features of various anterior skull base lesions.
- 7) Write short notes on:
  - a) Retroperitoneal fibrosis
  - b) Pheochromocytoma
  - c) Adenomyosis
  - d) Medullary sponge kidney
  - e) Pigmented villonodular synovitis
- 8) Describe the types of IUGR. Discuss the role of Radiologist in evaluation of IUGR.
- 9) What is Phakomatosis? Enumerate the various conditions in this group and describe the imaging features of Neurofibromatosis.
- 10) Write short notes on:
  - a) Schizencephaly
  - b) MRI in meniscal injuries
  - c) Solitary thyroid nodule
  - d) Hypoxic ischemic encephalopathy
  - e) Juvenile angiofibroma

#### M.D. DEGREE EXAMINATION – APRIL, 2014 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Osteoporosis and skeletal muscle dysfunction in COPD
- 22) Pulmonary manifestations of Rheumatoid arthritis
- 23) Hepato-pulmonary syndrome
- 24) Etio-pathogenesis and management of organizing pneumonia.
- 25) Management of ARDS
- 26) Metabolic and endocrine para neoplastic syndromes
- 27) Radiologic signs and management of pulmonary hydatid disease
- 28) Prevention of community acquired pneumonia
- 29) Role of PET in lung cancer
- 30) Bronchial provocation test

## M.D. DEGREE EXAMINATION – APRIL, 2014 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Enumerate coccidian parasites frequently isolated from stool samples of immunocompromised patients and discuss their rapid identification methods.
- 22) Discuss Japanese B encephalitis in India and its diagnostic methods.
- 23) Classify enteroviruses. Briefly discuss the laboratory methods for identification of enteroviruses.
- 24) Discuss opportunistic fungal infections in immunocompromised patients and outline their laboratory diagnostic methods.
- 25) Outline molecular methods in detection of RNA viruses causing lower respiratory tract infections.
- 26) Briefly describe the general laboratory methods in detection of parasitic infections. Outline concentration techniques.
- Classify dimorphic fungi. Describe briefly their laboratory diagnostic methods.
- 28) Briefly describe viral quantification methods.
- 29) Describe the mechanism of action of various antiviral drugs.
- 30) Describe the cultural and microscopic characteristics of dermatophytes.

# M.D. DEGREE EXAMINATION – APRIL, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Give a critical appraisal of ICDS.
- Describe the evolution of the programmes of Maternal and Child Health Services in India.
- 3) List out the causes of Infant mortality in India. Describe in detail the predisposing factors.
- 4) What are the effects of health due to Noise exposure? Describe in detail the preventive and control measures for Noise Pollution.
- 5) Discuss the WHO MGRS Growth Chart. What are the major differences with the WHO reference chart?
- 6) Describe the Total Sanitation Campaign.
- 7) Discuss Postconceptional methods. List the merits and demerits of each.
- 8) Define ergonomics. Describe in detail health problems associated with use of computers.
- 9) Discuss the preventive measures for control of Pneumoconiosis.
- 10) Discuss the health hazards of those involved in Agriculture in India and list measures for their prevention and control.

# M.D. DEGREE EXAMINATION – APRIL, 2014 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Derealization.
- 2) Primary Delusion
- 3) Moclobemide.
- 4) Delirium Tremens.
- 5) Neuroleptic Malignant Syndrome.
- 6) Drift Hypothesis of Schizophrenia.
- 7) Tardive Dyskinesia.
- 8) Nosology of Schizoaffective Disorder.
- 9) Role of Psychiatrist in disaster.
- 10) Couple Therapy.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 BIOCHEMISTRY

Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Vitamins as coenzymes.
- 22) Folic acid involvement in one carbon metabolism.
- 23) Regulation and metabolic fate of T<sub>3</sub> and T<sub>4</sub> hormones.
- 24) Narrate two functions and two deficiency manifestations of Selenium and Zinc.
- 25) Metabolic effect of Insulin on glycolysis and gluconeogenesis.
- 26) Narrate two functions and two deficiency manifestations of Copper and Iodine.
- 27) Hypervitaminosis A and D.
- 28) Effect of catecholamines on carbohydrate and lipid metabolism.
- 29) Biochemical changes in Thiamine deficiency.
- 30) Glycemic index and its importance.

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#### M.S. DEGREE EXAMINATION – APRIL, 2014 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Glucocorticoids: Mechanism of Anti-inflammatory effects and its adverse effects.
- 2) Glycopeptide antibiotics.
- 3) Anti-metabolites in cancer chemotherapy.
- 4) Amphotericin B.
- 5) Dipeptidyl Peptidase IV inhibitors.
- 6) Artemisinin combination therapies.
- 7) Pharmacokinetics of oral Iron and management of Iron over dosage.
- 8) Antimicrobial resistance and ways to tackle it.
- 9) Drug therapy of Multibacillary leprosy.
- 10) Fibrinolytic drugs.

# M.D. DEGREE EXAMINATION – APRIL, 2014 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Discuss mortuary services in mass disaster.
- 22) Describe important landmarks of foetal development.
- 23) Discuss the autopsy findings in a case of death due to torture.
- 24) Medico legal importance of Human bite marks.
- 25) Primary and secondary markings on bullet.
- 26) Discuss section 320 IPC.
- 27) The dead body of a girl is recovered from well. How will you determine the cause of death?
- 28) Discuss medico legal aspects of pregnancy.
- 29) Discuss the injuries caused in riots.
- 30) How examination of blood stains help to establish charges of murder?

# M.D. DEGREE EXAMINATION – APRIL, 2014 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

Draw diagrams wherever necessary All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Pressure-volume relationship of left ventricle and effects of ventricular dysfunction on it.
- 2) Action potential of a cardiac muscle fiber and its ionic basis.
- 3) Baroreceptor reflex regulation of blood pressure.
- 4) Oxygen-hemoglobin dissociation curve and factors affecting it.
- 5) Chemical control of respiration.
- 6) Properties of receptors.
- 7) Central and peripheral modulation of pain.
- 8) Connections and functions of cerebellum.
- 9) Role of hypothalamus in food intake.
- 10) Travelling wave hypothesis in hearing.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 RADIOTHERAPY

Paper-III: Principles and Practice of Radiotherapy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Write on risk factors, symptoms and signs and treatment of Radiation pneumonitis.
- 22) Radiotherapy in the treatment of Wilms' tumour.
- 23) Management of malignant spinal cord compression.
- 24) Write the management of a patient with stage I seminoma testis.
- 25) Role of radiotherapy in the definitive treatment of penile cancer.
- 26) Desmoid tumours.
- 27) Prophylactic cranial irradiation for leukaemia.
- 28) Craniopharyngioma.
- 29) Androgen deprivation therapy.
- 30) How will you evaluate and treat a patient with squamous cell cancer in the left upper deep cervical lymph node and no obvious primary?

## M.S. DEGREE EXAMINATION – APRIL, 2014 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe various types of skin grafts, flaps and their applications.
- Discuss etiology, pathogenesis, clinical features and management of renal calculus.
- Describe etiology, types various clinical tests, management and complications of varicose veins.
- 4) Etiology, types and clinical features of cholelithiasis and management of common bile duct stones.
- 5) Etiology, pathogenesis and management of occlusive arterial disease of lower limbs.
- 6) Hepatocellular carcinoma.
- 7) Multiple endocrine neoplastic syndromes.
- 8) Pathogenesis, clinical features and staging of carcinoma rectum.
- 9) Write about the various types and management of anorectal anomalies.
- 10) Undescended testis.

# M.S. DEGREE EXAMINATION – APRIL, 2014 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Pathological fractures.
- 2) Giant cell tumor of bone.
- 3) Lumbar spinal stenosis.
- 4) Slipped capital femoral epiphysis clinical presentation, radiology and management.
- 5) Radial club hand.
- 6) Compartment syndrome.
- 7) Carpal tunnel syndrome.
- 8) Skeletal manifestations of neurofibromatosis.
- 9) Achondroplasia.
- 10) Torticollis.

### M.S. DEGREE EXAMINATION – APRIL, 2014 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Management of a 75-year old woman with gradually progressive, painless diminution of vision in both eyes for 7 years and sudden onset of pain and redness in one eye over two days with marked loss of vision.
- 22) Lincoff's rule in locating breaks in rhegmatogenous retinal detachment.
- 23) Systemic associations of uveitis.
- 24) Ways to tackle the problem of cataract backlog in India.
- 25) A-V phenomenon in squint.
- 26) Keratoprosthesis.
- 27) Diabetic maculopathy.
- 28) Vitreous substitutes.
- 29) Floaters and flashes in the visual field.
- 30) Ophthalmic changes and complications in pregnancy.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss the management of maxillo-facial trauma following a road traffic accident.
- 2) Hyperkinetic voice disorders.
- 3) Causes and management of acute vertigo.
- 4) Complications of chemotherapy for head and neck cancer.
- 5) Management of sudden profuse epistaxis in a 50 year old male.
- 6) Causes and management of stridor in a 3 year old child.
- 7) Management of muscle tension dysphonia.
- 8) Evaluation of dysphagia in a 40 year old female.
- 9) Management of metastatic cervical lymph node of unknown origin.
- 10) ENT manifestations of human immunodeficiency virus disease.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Differences between microscopic structure of muscular and elastic artery.
- 2) Differences between microscopic structure of active and passive mammary gland.
- 3) Histology of Pituitary gland
- 4) Steps of tissue processing for Electron microscopy.
- 5) Early methods of detecting genetic abnormalities.
- 6) Sex Chromatin.
- 7) Role of GIFT in ART (Assisted reproductive technology).
- 8) Anatomical Act.
- 9) X linked inheritance.
- 10) Histology of retina.

# M.D. DEGREE EXAMINATION – APRIL, 2014 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Vulvovaginitis in children.
- 22) Antimonials in leprosy.
- 23) Kaposi sarcoma.
- 24) Pelvic inflammatory disease.
- 25) Syndromic management of urethral discharge in a male.
- 26) Histopathology of leprosy.
- 27) Acute scrotal pain.
- 28) Lepromin test.
- 29) Describe the differential diagnosis of leprous neuropathy.
- 30) Voluntary muscle testing in leprosy.

# M.D. DEGREE EXAMINATION – APRIL, 2014 HOSPITAL ADMINISTRATION

#### Paper-III - Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Methods of Health Education in Hospital and their importance.
- 2) Risk management as applicable to Critical Care Areas of a hospital.
- 3) Consumer Protection Act and its applicability to Hospitals.
- 4) Stages in Hospital Project.
- 5) Building Management systems and their importance in Hospital Planning.
- 6) Antibiotic policy and its importance.
- 7) Medical tourism.
- 8) Essential Services Maintenance Act.
- 9) Hospital Management Information System.
- 10) Hospital Equipment Maintenance principles and practices.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 EMERGENCY MEDICINE

Paper-III – Emergency Medicine (Surgery, Trauma, Orthopedics, Obstetrics, Anaesthesia, Eye, ENT, Dental, Radiology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Procedural sedation and analgesia in the emergency department.
- 22) Approach to an elderly male with acute abdominal pain, including differential diagnosis and relevant investigations.
- 23) Assessment and management of pelvic fractures.
- 24) Ectopic pregnancy Diagnosis and management.
- 25) How will you approach a patient with acute loss of vision?
- 26) Emergency Department evaluation and management of traumatic brain injury.
- 27) Injuries to flexor and extensor tendons of the hand.
- 28) Neck and upper airway infections.
- 29) Role of ultrasound in emergency diagnosis.
- 30) Classification of thermal burns and immediate management.

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#### GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Intermediate syndrome.
- 2. Causes of proteinuria. What is the approach and management of such patient?
- 3. Viral haemorrhagic fevers.
- 4. Stem cell therapy in neurological disorders.
- 5. Von Willebrand's disease.
- 6. Tele medicine in health care.
- 7. Management of heat stroke
- 8. Write the global features, pathogenesis, clinical features and treatment of leptospirosis .
- 9. Organophosphorus poisoning.
- 10. Neurological complications of chronic alcoholism.

#### M.S. DEGREE EXAMINATION – APRIL, 2014

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Hypothyroidism in pregnancy.
- 56. Management of Pulmonary Tuberculosis in pregnancy.
- 57. Aetiology and management of (DIC) Disseminated Intravascular Coagulation in pregnancy.
- 58. Diagnosis and management of Rupture uterus.
- 59. Post operative management after Abdominal Surgery.
- 60. Write short notes on:
  - a) Chlamydial Infection
  - b) Blood component therapy
- 61. Role of Hysteroscopy.
- 62. Management of Breast abscess in Puerperium.
- 63. Management of Traumatic PPH.
- 64. Write short notes on:
  - a) Urinary Tract Infections
  - b) Insulin Resistance

### M.D. DEGREE EXAMINATION – APRIL, 2014 PAEDIATRICS

#### Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31. Describe the management of status epilepticus.
- 32. Write the international classification of headache disorders and indications for neuroimaging.
- 33. Describe the aetiology and management of portal hypertension.
- 34. Describe the diagnosis and treatment of Celiac disease.
- 35. Describe the management of thalassemia major in children.
- 36. Describe the diagnosis and management of urinary tract infection in children.
- 37. Describe the haemodynamics and management of coarctation of aorta.
- 38. Enumerate clinical features suggestive of rheumatic disease and describe the differential diagnosis.
- 39. Describe the aetiology and management of aplastic anemia in children.
- 40. Describe the differential diagnosis of arthritis in children.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 57. Identify anaesthetic problems in patients with Haemophilia.
- 58. Discuss anaesthetic implications in patients with Hypothyroidism.
- 59. Discuss pre operative preparation and anaesthetic management of 8 year old child with perforating injury of the eye.
- 60. Write a note on immune mediated complications of blood transfusion.
- 61. A seventy year old man with coronary artery disease is posted for cholecystectomy. Discuss the anaesthetic management.
- 62. Write a note on thyroid crisis.
- 63. Write the anaesthetic management for a case of liver transplantation.
- 64. What is the medico legal importance of anaesthesia record keeping?
- 65. Enumerate the causes of post operative Hypoxemia.
- 66. Write a short essay on diabetic ketoacidosis.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 55. Describe the pathology, behaviour and molecular aspects of recently described thyroid neoplasms.
- 56. Describe modern technical advances in laboratory diagnostic cytology.
- 57. Compare and contrast, disorders of sexual development.
- 58. Describe the role of special stains and immuno cytochemistry in soft tissue neoplasms.
- 59. Prion diseases.
- 60. Recent concepts in shock.
- 61. Describe the principles, applications and scope of Telepathology.
- 62. Osteonecrosis.
- 63. Tumour immunology.
- 10. Define, classify and signify the metaplasia of female genital tract.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014 RADIO DIAGNOSIS

Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 49. Discuss the principles of diffusion weighted imaging and its clinical applications.
- 50. Discuss the role of MRI in a pregnant patient with acute abdominal pain
- 51. Describe the role of MRI in the imaging in diffuse liver disease.
- 52. Write short notes on:
  - a) Cine MR imaging and its utility d) PET in evaluation of lymphoma
  - b) TRUS guided interventions
- e) Cardiac stress imaging

- c) CT dosimetry
- 53. Discuss the concept of molecular imaging. What are the various modalities used in molecular imaging? Elaborate the role of MRI in molecular imaging.
- 54. Describe the anatomy of the limbic system. Discuss imaging in temporal lobe epilepsy.
- 55. Write short notes on:
  - a) MR Enteroclysis
- d) Intrauterine foetal intervention
- b) USG in Rheumatoid arthritis e) Carotid and vertebral artery dissection
- c) Imaging of the brachial plexus
- 56. Discuss the role of MRI in breast diseases.
- 57. Describe the utility of Hepatobiliary contrast agents.
- 58. Describe the instrumentation and principles of Radiofrequency ablation. Discuss the indications, patient selection, procedure and complications of its various implications.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Management of idiopathic PAH
- 32) New vaccines against tuberculosis
- 33) Air born infection control measures
- 34) Line Probe assay
- 35) Role of BAL in DPLD
- 36) EBUS bronchoscopy
- 37) Lung volume reduction surgery
- 38) Early diagnosis of lung cancer
- 39) Pirfenidone trials in IPF
- 40) Bronchial thermoplasty

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Discuss Southern Blot technique and its role in diagnostic Molecular Microbiology.
- 32) ELISPOT and its role in research Microbiology.
- 33) Use of Flow Cytometer in diagnostic Microbiology.
- 34) Discuss recent advances in culture methods in diagnostic virology.
- 35) Discuss automation in Blood Culture techniques in diagnostic Microbiology.
- 36) Discuss role of LAMP: Isothermal Loop Amplification techniques in diagnostic Microbiology.
- 37) Discuss recent advances in viral vaccine with special reference to Dengue and Swine Flu.
- 38) Discuss laboratory methods of detection methods of Metallo  $\beta$ -lactamases.
- 39) Role of microbiologist in control of nosocomial infections in ICU.
- 40) Give an account of MERS (Middle East Respiratory Syndrome) virus and its detection methods.

### M.D. DEGREE EXAMINATION – APRIL, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe the IPHS standards for Primary Health Centers.
- 2) Discuss the core strategies of NRHM.
- 3) Discuss the strategies of the National Urban Health Mission. Discuss the functions of ASHA.
- 4) Tensions are increasing at the border with a neighbouring country. Large scale influx of refugees is expected. You are District Health Officer of one of the districts at the border. Formulate a plan of action to tackle the mass migration.
- 5) Write a note on PERT. How does it differ from CPM?
- 6) Discuss the progress made under NLEP since its inception.
- 7) With the passage of the Companies Act, 2013 the mandate for corporate social responsibility (CSR) has been formally introduced to the dashboard of the Boards of Indian companies. Discuss the provisions in brief.
- 8) Discuss the term Appropriate Technology. Elucidate giving an example.
- 9) How will you evaluate the RCH programme implementation in the area under your PHC cover?
- 10) Critically evaluate the implementation of the National Health Policy 2002.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Standard Error of Mean.
- 2) Sick Role.
- 3) Cognitive Development Theory.
- 4) Therapeutic Index.
- 5) Phase III Drug Trial.
- 6) Testamentary capacity.
- 7) Adolescent Crisis.
- 8) Post Partal Depression.
- 9) Transcranial Magnetic Stimulation.
- 10) School refusal.

#### M.D. DEGREE EXAMINATION – APRIL, 2014 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Discuss point of care testing.
- 32) Laboratory management of Diabetes Mellitus.
- 33) Metabolism of ethanol.
- 34) Renal tubular acidosis.
- 35) Biomarkers of myocardial ischemia.
- 36) Describe two tests based on bilirubin metabolism.
- 37) Clinical interpretation of TSH in thyroid function test.
- 38) Role of HDL-cholesterol in lowering the risk of CHD.
- 39) Describe one renal function test based on glomerular function.
- 40) Give the time course of CK-MB, Troponin T and Myoglobin after onset of acute MI.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Anti obesity drugs.
- 2) Acetaminophen Poisoning.
- 3) Drug therapy of Kala-azar.
- 4) Hypolipidemic drugs.
- 5) Drug therapy of XDR Tuberculosis.
- 6) Pharmacotherapy of Attention Deficit Hyperactivity Disorder.
- 7) Phosphodiesterase inhibitors.
- 8) Urinary antiseptics and analgesics.
- 9) Drug therapy of Bipolar disorders.
- 10) Chelating agents.

### M.D. DEGREE EXAMINATION – APRIL, 2014 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Discuss precautions against medical negligence.
- 32) Res judicata.
- 33) Describe post mortem findings in cyanide poisoning.
- 34) Define drug addiction. How will you investigate a case of death due to drug abuse?
- 35) Describe the advanced analytical methods applied to post mortem samples.
- 36) Discuss civil responsibilities of a mentally ill person.
- 37) Discuss poisoning as an occupational hazard.
- 38) Discuss legal tests to determine criminal responsibilities of a mentally ill person.
- 39) Dementia and its medico legal importance.
- 40) Discuss consent in medical practice.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Heart rate variability indices.
- 2) Types of high altitude illness.
- 3) Pathophysiology of heart failure.
- 4) Endogenous opiod systems.
- 5) Myasthenia gravis.
- 6) Motor disorders of the esophagus.
- 7) Cushing's Syndrome.
- 8) Physiology of contraception.
- 9) Electroencephalogram and its clinical applications.
- 10) Functional significance of surfactant.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### RADIOTHERAPY

Paper-IV: Clinical subjects in relation to Radiotherapy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Vaccination against Human papilloma virus.
- 32) Write in brief on CyberKnife.
- 33) What are the different techniques of total body radiation?
- 34) Write the indications for stereotactic radiosurgery. How is arteriovenous malformation treated?
- 35) Endovascular brachytherapy.
- 36) Iridium 192.
- 37) Inverse planning.
- 38) Write on the steps involved in the planning of 3D Conformal Radiotherapy.
- 39) Accelerated partial breast irradiation.
- 40) Positron emission tomography in oncology.

#### M.S. DEGREE EXAMINATION – APRIL, 2014 GENERAL SURGERY

Paper-IV : General Surgery, Operative Surgery

including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the guidelines for diagnosis and management of pancreatic trauma
- 2) Post operative complications of gastrectomy.
- 3) Pancoast tumor.
- 4) Diverticular disease of colon.
- 5) Discuss chronic mesenteric ischemia.
- 6) Recent advances in investigations of intestinal tuberculosis.
- 7) Classifications of fistula in ano and recent advances in their management.
- 8) Discuss benign breast disease.
- 9) Discuss about Wilm's tumor.
- 10) Role of 'LASERS' in surgery

### M.S. DEGREE EXAMINATION – APRIL, 2014 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Pedicle screw.
- 2) Minimal invasive arthroplasty.
- 3) Synthetic bone substitutes.
- 4) Musculo skeletal manifestations of Haemophilia.
- 5) Bone cement.
- 6) Antibiotic prophylaxis in Orthopedic surgery.
- 7) Total disc replacement.
- 8) Stem cell research and Orthopedics.
- 9) Interfascicular nerve repair.
- 10) Total shoulder replacement.

#### M.S. DEGREE EXAMINATION – APRIL, 2014 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Microtrabeculectomy.
- 32) Recent advances in management of keratoconus.
- 33) Eye banking legislation.
- 34) Accommodating IOLs.
- 35) Merits and demerits of small incision Cataract Surgery.
- 36) Recent Advances of anterior segment Imaging.
- 37) Stem cells in ophthalmology.
- 38) Fugo knife.
- 39) Nucleotomy techniques.
- 40) Classification of ocular trauma.

#### 183-NR M.S. DEGREE EXAMINATION – APRIL, 2014 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss the surgical technique of near-total laryngectomy.
- 2) Speech therapy for unilateral recurrent laryngeal nerve palsy.
- 3) Complications of tracheostomy.
- 4) Surgical landmarks for facial nerve during superficial parotidectomy.
- 5) Endoscopic optic nerve decompression.
- 6) Management of aspiration following supraglottic laryngectomy.
- 7) Endoscopic modified Lothrop's procedure.
- 8) Management of retropharyngeal abscess.
- 9) Peanut in the right bronchus in a 3-year-old child.
- 10) Role of coblator in ENT.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Superior cervical sympathetic ganglion.
- 12) Connections of Limbic System.
- 13) Various Nuclei and connections of Thalamus.
- 14) Hypoglossal nerve.
- 15) Circle of Willis.
- 16) Development and anomalies of Thyroid.
- 17) Development of inter ventricular septum.
- 18) Derivatives of Paramesonephric duct in males and Females.
- 19) Development of anomalies of Face.
- 20) Fourth Ventricle.

#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) ANA profile in collagen vascular diseases.
- 32) Pyoderma Gangrenosum.
- 33) Hereditary Angioedema.
- 34) Skin signs of hepatic failure.
- 35) Zinc deficiency and skin.
- 36) Arterial ulcer.
- 37) Raynaud's phenomenon.
- 38) Perianal abscesses and fistulae.
- 39) Diabetic foot.
- 40) Pressure ulcer.

#### M.D. DEGREE EXAMINATION - APRIL, 2014

#### HOSPITAL ADMINISTRATION

Paper-IV – Administration of Clinical and Non-Clinical Services and Administrative procedures

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Planning Premises of Ambulatory care of a 500 bedded District Hospital.
- 2) HVAC systems for Operation Theatres.
- 3) Radiation Safety.
- 4) Quality Assurance of Laboratory services.
- 5) Physical facility and equipment planning for accident and emergency services of a proposed 1000 bedded tertiary care hospital.
- 6) Importance of Medical Records.
- 7) Customer relationship management.
- 8) Riggs Pattern Wards.
- 9) Quality Assurance Programme of CSSD.
- 10) Salient features of Dialysis unit.

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#### M.D. DEGREE EXAMINATION – APRIL, 2014

#### **EMERGENCY MEDICINE**

Paper-IV –Emergency Medicine including recent advances (Pediatrics, Principles of Pre-Hospital Care; Disaster, Forensic Medicine)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Resuscitative equipment in pre-hospital care.
- 32) Sudden infant death syndrome.
- 33) Approach to a child with diabetic ketoacidosis and emergency management.
- 34) Triage principles and categories.
- 35) Examination and documentation for a female victim of rape.
- 36) Emergency Department treatment of vomiting and diarrhea in children.
- 37) Recent definition and classification of acute respiratory distress syndrome.
- 38) Presentation and management of Vaso-occlusive crisis in sickle cell disease.
- 39) Newer anti-epileptic drugs.
- 40) Diagnosis and management of attempted hanging.

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JM.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014

**GENERAL MEDICINE** 

## Paper-II – Disorders of CVS, respiratory system, Kidney, GIT including liver and pancreas

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 75. Pulmonary Vascular Diseases
- 76. Discuss the pulmonary manifestations of connective tissue disorders
- 77. Discuss the recent advances in management of Heart failure
- 78. Give an account of Biomarkers of Acute Kidney Injury
- 79. Discuss Irritable bowel syndrome in brief
- 80. Sick sinus syndrome
- 81. Discuss the aetiology, clinical features and treatment of acute pancreatitis
- 82. Discuss the Liver Function Tests patterns in Hepatobiliary disorders
- 83. Discuss about Pigmentary lesions of oral mucosa
- 84. Discuss about portal-hypertension

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 OBSTETRICS & GYNAECOLOGY

#### Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Enumerate causes of 1<sup>st</sup> trimester bleeding. How will you manage?
- 12) How will you investigate and manage case of jaundice in pregnancy
- 13) Discuss the techniques and complications of cerclage operation
- 14) Meconium Aspiration Syndrome Diagnosis and Management
- 15) Interventional Sonography in Obstetrics
- 16) What are the types of uterine dysfunction? Describe in detail about the active phase disorders.
- 17) Enumerate the causes of unengaged head in primigravida at full term. Describe any one cause and management of labor.
- 18) Define maternal mortality rate. Discuss the factors influencing and measures to decrease maternal mortality in India
- 19) Postnatal Care and followup of HIV affected mother and child
- 20) Neonatal convulsions

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2014

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) A term baby weighing 2.6kg was brought with jaundice at 14 hours after birth. What are the likely causes? How will you investigate and manage the baby?
- 12) Somatization disorders in children
- 13) Discuss the causes, differential diagnosis and management of respiratory distress in a new born.
- Discuss about etiology, classification and management of learning disabilities in children
- 15) Discuss the nutritional requirements of a Preterm child 1000 gms. Discuss various complications in Preterm.
- 16) Discuss the causes and evaluation of anaemia in a new born
- 17) Newer vaccines in Children
- 18) Describe briefly about biochemical monitoring lab investigations for brain oriented resuscitation and newer modulates treatment of HIE.
- 19) Mention basic principles of sleep hygiene for children and adolescents
- 20) Write briefly objective of school health problems

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2014

#### ANAESTHESIOLOGY

Paper-II: Anaesthesia in relation to associate systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss the pathophysiology and diagnosis of a case of pheochromocytoma. Give an account of preparation monitoring and anaesthetic management of a 25 years old patient suffering from pheochromocytoma.
- 12) What is Anaesthetic management of a patient suffering with bronchial asthma under general anaesthesia?
- 13) Anaesthesia for perforating injury of the eye in a five year old child
- 14) Hepato renal syndrome in anaesthesia practice, aetiology and management.
- 15) A 60 year old patient with recent MI is admitted with Duodenal perforation. Discuss the Anaesthetic management in the case.
- 16) A 50 year old diabetic patient with ketosis comes for Emergency surgery below knee amputation due to Cellulitis. How do you manage the case?
- 17) A middle aged chronic smoker with Bronchiectasis is posted for Rt lower lobectomy. Discuss the preoperative preparation, anaesthetic management of the case.
- 18) Write about conjoined twins. Describe the anesthetic challenges in a craniopagus conjoined twins of 2 years age posted for separation.
- 19) Discuss anticoagulation and Neuraxial blocks in Obstetric patients
- 20) Describe the preparation, anaesthetic management, post operative complications in a 54 year female posted for Functional Endoscopic Sinus Surgery under hypotensive Anaesthesia.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Etiology, Pathogenesis and diagnosis of metabolic disorders of bone
- 12) Prognostic indicators in Carcinoma Breast
- 13) Classify ovarian tumors and discuss germ cell tumors
- 14) Discuss Autoimmune thyroid disorders
- 15) Discuss in detail about lab diagnosis of Meningitis
- 16) Discuss Cardiomyopathies and Pathology of hypertrophic Cardiomyopathy.
- 17) Discuss the pathology of Non-Cirrhotic portal fibrosis
- 18) Value of placental examination in Perinatal death
- 19) Genetic basis of Colorectal Carcinoma
- 20) Genetic syndromes associated with familial primary hyperparathyroidism.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 RADIO DIAGNOSIS

Paper-II: Components of MD Radio diagnosis (clinical radiology and imaging related to gastrointestinal tract, genitourinary tract and Obstetrics and Gynecology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLWING:

- 11) Draw a neat line diagram of perinephric spaces including its relationship with other spaces. Write CT features of perinephric abscess and urinoma.
- 12) How do you evaluate a case of solid ovarian tumor? Describe the differentials of solid ovarian neoplasm.
- 13) Role of MRI in evaluation of carcinoma bladder
- 14) Describe imaging features, types, staging and interventions in esophageal carcinoma
- 15) Emphysematous cholecystitis
- 16) Discuss the imaging features of retroperitoneal masses
- 17) Choledochal cyst.
- 18) Discuss the D. D of adnexal masses.
- 19) Describe the method of Tiffa examination in ante natal patients.
- 20) Discuss the role of colour doppler in a case of IUGR

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions.

All questions carry equal marks.

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Sequelae of Pulmonary Tuberculosis
- 12) Role of Surgery in Pulmonary Tuberculosis
- 13) HIV and Tuberculosis
- 14) Diagnosis and treatment of tuberculous pleural effusion
- 15) Brock Syndrome
- 16) Discuss ATT induced hepatotoxicity and its management
- 17) Discuss rapid methods in diagnosis of TB.
- 18) Mechanisms of ATT drug resistance
- 19) Newer anti Tuberculosis drugs
- 20) Impact of Tuberculosis of Nutrition

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Pathogenesis and Lab diagnosis of Leptospirosis.
- 12) Enumerate bacteria causing atypical pneumonia. Describe the epidemiology, pathogenesis and lab diagnosis of Legionella Pneumophila.
- 13) Describe the epidemiology, pathogenesis and lab diagnosis of Brucellosis.
- 14) Classify genus Haemophilus. Describe the pathogenesis and lab diagnosis of H. influenzae.
- 15) Classify Clostridium group organisms. Write the laboratory diagnosis of Diphtheria. Add a note its prophylaxis.
- 16) Classify Rickettsiae. Write laboratory diagnosis of Rickettsiae. Add a note its prophylaxis.
- 17) Write an essay on Vancomycin resistance in gram positive bacteria
- 18) Write about recent advances in MRSA.
- 19) Describe about Campylobacter species causing diseases in humans
- 20) Write about immunity in Leprosy and its prognostic applications.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 COMMUNITY MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss the technical basis of Revised National Tuberculosis Program. Add a note on Highly Active Retroviral Therapy.
- 12) Describe the problem of Mother to Child transmission of HIV and the measures to control the same.
- 13) Discuss the epidemiology and control of major cancers in India.
- 14) Describe in detail about the epidemiology of Rheumatic Heart disease and its control.
- 15) Write a short essay on the epidemiology and control of Iodine deficiency disorders
- 16) Mention occupational diseases. Write in detail about medical, engineering and legislative measures in the prevention of occupational diseases
- 17) Describe National Blind Control Program
- 18) Describe the epidemiology and control of diarrhoea in under five children
- 19) Describe the aspects of School Health Services
- 20) National Filaria Control Programme

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Amnestic syndrome
- 12) Illness anxiety disorders
- 13) Sub Cortical dementias
- 14) Psychiatric consequences of cancer
- 15) Neuro Psychiatric complications of head injury.
- 16) Wernicke's encephalopathy.
- 17) Post stroke depression.
- 18) Phantom limb phenomenon.
- 19) Clinical features, etiopathology and management of Lewy Body Dementia.
- 20) Galantamine.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) How Glucose is oxidized in Erythrocytes and What is its significance?
- 12) Explain the Catabolism of purine nucleotide and its related disorders.
- 13) Aminoacidurias, tests to detect them and its clinical importance.
- 14) Write short notes on:
  - a) Mucopolysaccharides
  - b) Role of Carnitine in  $\beta$ -oxidation of fatty acid.
- 15) Essential fatty acids and write the tests to check the purity of fats and oils
- 16) Explain How Catecholamines are synthesized, what are the tests to detect them?
- 17) Give an account of hydroxylation reactions take place in the body. Add a note on their importance.
- 18) Describe the TCA cycle, its energetics and regulation
- 19) Describe the role of folic acid in nucleotide synthesis, explain mechanism of action of antifolate drugs.
- 20) Describe the chemistry, biochemical role and clinical significance of HbA1c

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe the modification of GABA activity in the brain by drugs.
- 12) Direct thrombin inhibitors.
- 13) Current status in the Pharmacotherapy of Alzheimer's disease
- 14) Discuss in detail the analgesic action and various routes of administration of opiod analgesics.
- 15) Discuss the Pharmacology of Cardioselective beta blockers in therapeutics
- 16) Describe the applied Pharmacology of Na<sup>+</sup> Channel blockers
- 17) Vaptans
- 18) Second generation antipsychotics
- 19) Drugs causing Insomnia
- 20) Malignant Hyperthermia

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 FORENSIC MEDICINE

Paper-II: Pathology and Microbiology in relation to forensic medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Write about artefacts of resuscitation and artefacts of medical intervention.
- 12) Write about cardiac dysrhythmia of undetermined etiology, differential diagnosis with autopsy findings of heart
- 13) Write about spinal cord injuries, healing and pathological findings during autopsy.
- 14) Discuss the role and cautions of forensic pathologist while handling the HIV cases.
- 15) Disposal of biological waste
- 16) Medico and Legal aspects of Exotic diseases
- 17) Define shock and pathophysiology of septicemic shock.
- 18) Medico legal importance of wound healing
- 19) Differentiate concussion of brain from drunkenness
- 20) Discuss the microorganisms associated with burns

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 PHYSIOLOGY

### Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Leucopoiesis
- 12) Enterohepatic circulation
- 13) Counter Current Mechanism
- 14) Diabetes Mellitus and Diabetes insipidus
- 15) Menarche and Menopause
- 16) Describe the mechanism of production and maturation of sperms
- 17) GI Hormones. Add a note on Ghrelins.
- 18) Bombay Blood Group and other minor Blood Group systems
- 19) Synthesis and functions of Thyroid Hormones
- 20) Calcium Homeostasis

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2014

#### **RADIOTHERAPY**

Paper-II: CNS, Head & Neck, Orbit thyroid, Lung and Mediastinal malignancies, malignancies breast esophagus, lymphomas, leukemia's and pediatric tumors.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) What is the etiology, classification and treatment of mediastinal germ cell tumors?
- 12) What are the paraneoplastic syndromes associated with small cell cancer of lung?
- 13) Describe the classification staging and treatment of Thymomas
- 14) Describe the methods of palliation of dysphagia in a patient with metastatic Ca esophagus.
- 15) What is the role of chemotherapy and radiotherapy in mesothelioma of the lung?
- 16) What is the staging and management of inflammatory breast cancer?
- 17) How do you manage Acute Lymphoblastic Lymphoma?
- 18) Describe Trilateral Retinoblastoma and how do you manage?
- 19) Describe stage-wise management of Ca Nasopharynx
- Describe the clinical features, evaluation and management of Medullary Ca. Thyroid.

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2014 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

- 1. Management of polytrauma patients with penetrating injuries of chest and blunt injury abdomen.
- 2. Posterior dislocation of shoulder
- 3. Discuss the management options in Rectal prolapse
- 4. Discuss extradural hematoma.
- 5. Describe the clinical features, investigations and management of Pelvic fractures
- 6. Role of Genetics in Carcinoma Breast and Gastro intestinal system
- 7. What are the various methods to assess blood loss during surgery and treatment?
- 8. Discuss etiological factors, clinical features and management of decubitus ulcers
- 9. Malignant melanoma Aetiology, Clinical features and management
- 10. Principles governing the management of fractures

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER,2014 ORTHOPAEDICS

Paper-II: Traumatology & Rehabilitation

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

- 1. Prevention and management of complications of Total Hip Joint Replacement Arthroplasty
- 2. Ultrasound in musculoskeletal disorders
- 3. Biological Osteosynthesis.
- 4. Bone Graft Substitutes
- 5. Pelvic fractures classification and management
- 6. Explain the management of fracture humerus with radial nerve palsy.
- 7. Discuss the classification of Dorso Lumbar Vertebral Fractures
- 8. Classify peri prosthetic fractures around the knee and discuss the Management
- 9. Pilon fractures management
- 10. Acute compartment syndrome of leg. Clinical evaluation diagnosis and management.

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# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION-DECEMBER, 2014 OPHTHALMOLOGY

Paper-II: Lids, Ocular adnexa, systemic ophthalmology, neuro ophthalmology, community ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) How do you classify Entropion? Describe the various Surgical techniques for Senile Entropion.
- 12) Describe the Clinical features and management of Lacrimal Gland Tumours
- 13) Describe the Anatomy of Chiasma and its various Neurological filed defects.
- 14) Describe the Clinical features of Pregnancy induced Hypertensive Retinopathy.
- 15) Management of Paediatric Orbital Tumours
- 16) Discuss the causes and problems in the management of Childhood Blindness.
- 17) How do you investigate Dry Eye and Management of Dry Eye syndromes?
- 18) Describe the Clinical features and treatment of Clinically significant Macular Oedema
- 19) Describe the Anatomy, Clinical features and management of the Trochlear Nerve Palsy.
- 20) a) Role of MRI in Orbital Diseases
  - b) External Dacryocystorhinostomy

# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 OTORHINOLARYNGOLOGY

Paper-II: Diseases of ear, nose and throat, surgical pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Medical management of Sinonasal Polyposis.
- 12. Describe the different types of temporal bone fractures and their management.
- 13. Discuss the presenting features, signs, symptoms and the management of post aural fistula
- 14. What are the causes for sudden sensorineural hearing loss? How it managed?
- 15. Describe Ludwig's angina and its spread of infections to different neck spaces?
- 16. Discuss the Pathology, diagnosis management of positional vertigo?
- 17. Describe the Pathogenesis of Invasive fungal sinusitis.
- 18. What are the grafts used in middle ear and mastoid surgery?
- 19. Write the complications of endoscopic sinus surgeries and their management
- 20. Describe BERA.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2014

### **ANATOMY**

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe the parts, relations and age changes of prostate gland
- 12) Describe cervical plexus
- 13) Describe gross anatomy of uterus in detail. Add a note on the supports of uterus.
- 14) Describe the location, relations and applied Anatomy of Thyroid Gland
- 15) Pleura of the Lungs
- 16) Boundaries and contents of sub-occipital triangle
- 17) Discuss the intrinsic muscles of larynx, their nerve supply and actions.
- 18) Describe the blood supply of heart in detail. Add a note on coronary Anastomosis.
- 19) Discuss the inguinal canal in detail. Add a note on the inguinal triangle.
- 20) Discuss the palmar spaces of hand in detail.

### M.D. DEGREE EXAMINATION – DECEMBER, 2014 D.V.L.

### Paper-II: General dermatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss the pathophysiology and clinical aspects of pruritus.
- 12) Discuss in detail hair disorders
- 13) Hypo and hyper melanosis
- 14) Granuloma elevatum.
- 15) Discuss diseases and mucocutaneous disorders of male genitalia
- 16) Biologicals in Dermatology
- 17) Paraneoplastic pemphigus
- 18) Basal cell carcinoma
- 19) Classification of hypersensitivity vasculitis and write in detail about Henoch-Schonlein Purpura
- 20) Discuss the diseases of Sebaceous gland

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Briefly explain the various Epidemiological studies
- 12) Medical Tourism
- 13) Medical Ethics and Informed Consent
- 14) Case Control and Cohort Studies with Illustrations
- 15) Waste Disposal Programme in a Teaching Hospital
- 16) What is the role of National Health Committees? Discuss Bhore Committee Recommendations.
- 17) Name some important Health Indicators of a Community. How can you plan improving them?
- 18) Scope and limitations of Health Insurance in India
- 19) What do you understand by sampling? Discuss its techniques
- 20) What do you mean by Managed care? Explain how it helps health sector

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 IMMUNOHEMATOLOGY AND TRANSFUSION MEDICINE

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Platelet antigens
- 12) Mixed Lymphocyte culture reaction
- 13) ISBT nomenclature on Red cell surface antigens
- 14) Pathophysiology of Haemolytic Transfusion Reactions
- 15) Platelet Refractiveness causes, diagnosis and management
- 16) Mendelian theory of inheritance
- 17) West guard rules in TTI testing
- 18) Hybridoma and its application in immunohematology
- 19) Immunology related to transfusion medicine
- 20) Serological problems with autoantibodies.

### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 EMERGENCY MEDICINE AND TRAUMA PAPER-II

Time: 3 hours Max. Marks: 100

NOTE: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Write the mechanism of encephalopathy and its grades. Discuss the principles of Hepatic diet prescription and the rationale of aminoglycoside prescription in hepatic encephalopathy.
- 12) Discuss the pathophysiology, prehospital care management and prognosis of submersion injuries in ED.
- 13) Intracranial Pressure
  - A) Definition
  - B) Normal wave from description
  - C) Mention the various methods to monitor ICP
  - D) Prescribe standard management principles in a case of increased intracranial pressure of 30mmHg.
- 14) Write the mechanism of thyrotoxicosis in brief and its clinical features, biochemical confirmation and general principles of management
- 15) What are the causes of respiratory failure in children? Discuss management of a child with respiratory failure.
- 16) Alveolar gas equation and its significance. Laplace law and its significance. Acute lung injury score and significance.
- 17) Atrioventricular Nodal Tachycardia
  - A) Mechanism
  - B) Various techniques to treat AVNRT
- 18) A) Mechanism of action of Alteplase
  - B) Write short notes on reperfusion injury
  - C) Contraindication of Alteplase
- 19) A) Beck's triad
  - B) Altered hemodynamics in case of acute significant pericardial effusion.
  - C) Comment on ECG, 2D-Echo, ventilation / perfusion relation in pericardial Tamponade
- 20) A) Pathophysiology of ATN (Acute Tubular Necrosis)
  - B) Various methods to treat hyperkalemia in case of A.T.N
  - C) Comment on mechanism/s of metabolic acidosis in acute tubular Necrosis

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#### **GENERAL MEDICINE**

PAPER-IV: Tropical medicine, genetics, infectious diseases nutrition, critical care medicine

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Etiology, pathogenesis, clinical manifestation and diagnosis of Ebola Virus.
- 12) Discuss the physical findings of nutritional deficiencies.
- 13) Epigenetic inheritance.
- 14) Ethical, legal and social implications of Genomic Medicine.
- 15) Discuss the pathogenesis, manifestations and management of severe Falciparum Malaria.
- 16) Discuss the importance of trace minerals in Medicine.
- 17) Discuss tropical pulmonary eosinophilia.
- 18) Discuss the prevention of opportunistic infections in persons infected with HIV.
- 19) Daily monitoring measures in ICU.
- 20) Describe the examples of Genetic Testing and Possible interventions in endocrinal and neurological genetic disorders.

# MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS -DECEMBER, 2014 OBSTETRICS & GYNAECOLOGY

# PAPER-IV: MEDICINE AND SURGERY IN RELATION TO OBSTETRICS AND GYNAECOLOGY

TIME: 3 HOURS Max. Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Write briefly on Fetus Placental effects of SLE.
- 12) Surgical management of PPH.
- 13) Obstetric management of an antenatal mother with mitral valve replacement done before pregnancy.
- 14) What are the reasons for rising caesarean delivery rate? Describe measures to be taken to control the rate?
- 15) Discuss the post operative management of Abdominal distension in obstetrics and Gynecology.
- 16) Role of Partograph in Level 1, Level 2 and Level 3 health care facility.
- 17) Enumerate and describe the family welfare programmes implemented for antenatal, intra natal and post natal mothers.
- 18) Chemotherapy in choriocarcinoma.
- 19) Short notes on:
  - a) Use of diuretics in pregnancy
  - b) Prophylactic antibiotics in Gynaecological surgery
- 20) Differential diagnosis and management of fever in pregnancy.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS - DECEMBER, 2014 PAEDIATRICS

PAPER-IV: DISEASES OF INFANCY AND CHILDHOOD

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11] Discuss the etiology, clinical features investigations and treatment of pericardial diseases in children.
- 12] Discuss about the various interventional procedures and their indications in the cardiac problems of children.
- 13] Discuss the causes of coma and approach to a child with coma.
- 14) What is acute liver failure? Discuss epidemiology, clinical features and management of acute liver failure in a child.
- 15] Approach to a dysmorphic child.
- 16] Recent IAP guidelines for management of UTI in children.
- 17] Describe briefly about mitochondrial Encephalomyopathies.
- 18' Approach to a 6 months old child with cyanosis.
- 19] Discuss the causes and management of haemolytic anemia in children including the recent advances in management.
- 20) Recent advances in the management of Bronchiolitis.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 ANAESTHESIOLOGY

### PAPER-IV: INTENSIVE CARE MEDICINE, PAIN MEDICINE AND RECENT ADVANCES

TIME: 3 HOURS Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe the management of organophosparus poisoning in a 70 years male in intensive care unit. Mention about Intermediate syndrome.
- 12) Mention the factors influencing outcome of severe traumatic brain injury. How will you manage the case in intensive care unit?
- 13) Describe the methods available for non invasive ventilation. Mention the indications.
- 14) Discuss the current concepts in the management of a case of chronic obstructive airway disease in respiratory failure.
- 15) Describe the criteria and neurological test for brainstem death and preparing the patient for organ donation.
- 16) What are the recent advances in CPR?
- 17) Describe the recent concepts of massive intra operative blood loss.
- 18) Recent advances in the management of acute lung injury.
- 19) Discuss ICU management of Snake Poisoning?
- 20) Discuss complex regional pain syndrome, common types and ways to

reduce pain.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 PATHOLOGY

### PAPER-IV: RECENT ADVANCES IN PATHOLOGY RELATED TO CLINICAL MEDICINE

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11 Liquid based cytology for cervical screening.
- 12 Current concepts in the pathology of chronic hepatitis.
- 13] Gel technology in immunohematology.
- 14 Write about Medical Revalidation for Histopa thologists.
- 15] Write about the pathology of regenerative and neoplastic hepatocellular nodule.
- 16 Gene silencing.
- 17 Recent advances in Primary Carcinomas of Salivary glands.
- 18 Discuss Nanotechnology.
- 19 Predictive and Prognostic molecular markers in Breast Cancer.
- 20] Mucosal Pathology of the gastric cardia and Barett's Oesophagus.

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### MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 RADIODIAGNOSIS

PAPER-IV: Clinical radiology related to CNS, Orbits and recent advances in radiology and imaging and interventional radiology and nuclear medicine

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe the principle of microwave ablation. What are the indications and applications of the technique? Advantages and disadvantages of microwave ablation.
- 12) Describe high intensity focused ultrasound (HIFU/S) principle, instrumentation and its application.
- 13) Classify the material used for embolization procedures. What is the procedure and complications of bronchial artery embolization?
- 14) Describe the principles of digital radiography direct and indirect techniques. Role of flat palnel technology in mammographic tomosynthesis.
- 15) What is spectroscopy discuss role of spectroscopy in tumors of CNS?
- 16) Describe the technique of sonosalphingography with indications and contraindications.
- 17) Discuss the role of imaging in white matter diseases.
- 18) Principle and use of PET CT Scan in brain disorders.
- 19) Discuss fMRI with various paradigms.
- 20) Discuss the advantages of contrast enhanced MR imaging in breast lesions.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 PULMONARY MEDICINE

PAPER-IV: Epidemiology of tuberculosis and prevention, recent advances in tuberculosis

TIME: 3 HOURS Max.Marks: 100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Tuberculosis notification in India.
- 12) Atypical mycobacterial infection.
- 13) Infection control and hospital waste management under RNTCP.
- 14) Diagnosis and management of cystic fibrosis of lung.
- 15) Effects of Air Pollution in Respiratory system.
- 16) EBUS in Mediastinal lymphadenopathy from the various groups of lymphnodes procedure.
- 17) Electromagnetic navigation bronchoscopy.
- Indications, contraindications and complications of lung transplantation.
- 19) Non invasive ventilation in COPD.
- 20) Pulmonary manifestations of malarial disease.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 MICROBIOLOGY

PAPER-IV: APPLIED MICROBIOLOGY AND RECENT ADVANCES

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Principle, classification and application of Biosafety cabinets.
- 12) Describe about Biological Waste Management in the Microbiology department.
- 13) Classify Arboviruses. Write laboratory diagnosis of Dengue viruses.
  Add on its prophylaxis.
- 14) Write an essay on newer concepts in development of Vaccines.
- 15) Post eradication strategies in Polio.
- 16) Give an account on recent outbreak of EBOLA. Describe the laboratory diagnosis and prevention.
- 17) Enumerate newer antifungal agents, their mechanisms of action and uses.
- 18) Give an account of recent advances in sterilization and disinfection.
- 19) Describe the clinical applications of Monoclonal antibodies in diagnosing the diseases.
- 20) Write about laboratory accreditation. Describe about calibration of laboratory equipment.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 COMMUNITY MEDICINE

PAPER-IV: HEALTH ADMINISTRATION AND RELATED SUBJECTS

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss the various steps of planning cycle with an example.
- 12) Discuss the merits and demerits of health manpower situation in our health system.
- 13) Write in detail about evaluation of health services.
- 14) Describe the Integrated Disease Surveillance Project.
- 15) Define felt need. Discuss in detail about health planning in India.
- 16) Write in detail about the principles of health education.
- 17) Specific job functions of MPHA (M) & MPHA (F) in a Primary Health Centre.
- 18) Social Security measures for old aged people.
- 19) Write about World Health Day Theme of 2014.
- 20) UNESCO functions in India.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 PSYCHIATRY

#### PAPER-IV: PSYCHIATRIC SPECIALTIES

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Community care of mentally ill.
- 12) Child abuse and Neglect.
- 13) Neuropsychiatric aspects of epilepsy.
- 14) Psychotropic medication during pregnancy and lactation.
- 15) The effects of divorce and martial disruption on children.
- 16) Consultation-Liason Psychiatry.
- 17) Drug induced movement disorders.
- 18) Psychiatric rehabilitation.
- 19) Psychiatric aspects of organ donation.
- 20) Psychiatric disorders in late life.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 BIOCHEMISTRY

PAPER-IV: CLINICAL BIOCHEMISTRY

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) What are the components of Quality Control define and explain them?
- 12) Discuss the causes and diagnosis of diabetic keto acidosis.
- 13) Outline the biochemical tests for managing a patient of kidney disease.
- 14) Classify the Tumor Markers; discuss the role of molecular markers for cancer diagnosis.
- 15) Write short notes on:
  - a) DNA Finger Printing
  - b) Gene Libraries
- 16) Biochemical Investigations in the diagnosis of Hypothyroidism.
- 17) RELPs in the diagnosis of the diseases.
- 18) Write short notes on:
  - a) Enzyme pattern in M.I.
  - b) Insulin challenge test
- 19) Discuss the metabolic response to injury.

20) Monoclonal antibodies.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 PHARMACOLOGY

PAPER-IV: CLINICAL PHARMACOLOGY - THERAPEUTICS

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

11) Drug therapy of acne Vulgaris.

- 12) Write about cannabinoid receptors. Add a note on the role of cannabinoids in the treatment of obesity. Discuss the applied anatomy of drugs effective in the treatment of obesity.
- 13) Pharmacovigilance.
- 14) Discuss the current concepts in the treatment of Hypertension.
- 15) Drug abuse in sports.
- 16) Current status of phosphodiesterase III inhibitors.
- 17) Treatment of Insulin resistance.
- 18) Selective Oestrogen Receptor Downregulators.
- 19) Informed consent form.
- 20) Pharmacogenomics.

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS - DECEMBER, 2014 FORENSIC MEDICINE

PAPER-IV: FORENSIC MEDICINE PROPER

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) What are the duties and legal obligations of a doctor in case of poisoning?
- 2) Discuss in detail laws in relation to drunkenness.
- 3) Define drug dependence and discuss its changing trends.
- 4) Describe the treatment and medico-legal aspects of snake bite.
- 5) Discuss social and legal aspects of drug induced insanity.
- 6) The value of the diatom test in Forensic Medicine.
- 7) Write about ethical and legal issues in blood transfusion.
- 8) What is meant by physician assisted suicide and your opinion on legalizing euthanasia in India.
- 9) Product liability.
- 10) Describe the postmortem findings in deaths due to asphyxia.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS - DECEMBER, 2014 PHYSIOLOGY

PAPER-IV: APPLIED PHYSIOLOGY

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Explain the significance of Genetic code.
- 2) Discuss the pathophysiology of asthma.
- 3) Explain the role of feed forward circuitry in Homeostasis.
- 4) Physiological basis of stem cell therapy.
- 5) What are Evoked potentials? Describe their Clinical Applications.
- 6) "Hypertension is a syndrome and not a disease". Discuss the statement and it's implication.
- 7) Response of the body to starvation.
- 8) Diseases caused by G protein and G protein coupled receptors.
- 9) Interferons.
- 10) Neurotropins and its uses in various diseases.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS -DECEMBER, 2014 RADIOTHERAPY

PAPER-IV: Clinical subjects in relation to radiotherapy, recent advances in radiotherapy & oncology

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe Paraneoplastic Syndromes associated with various malignancies
- 12] Describe the techniques of matching the junction between the tangential fields and the supraclavicular field in adjuvant chest wall irradiation in post MRM
- 13] What is integrated Tumour Volume (ITV) in the planning of EBRT for Ca lung?
- 14) What is V20? What is the significance of V20 in the radiation planning of Ca lung?
- 15] What are the techniques and doses of Intra Luminal Radiation in the treatment of Ca esophagus?
- 16] What are the dose limiting OAR's in the abdominal cavity? What are their tolerance doses?
- 17] Describe the target organs and radiation portals in Ca Vulva.
- 18] Describe the technique of intracavitary radiation in Ca Cervix. What are the different fractionation schedules
- 19] What are the principles of Carbon ion Radiation Therapy?
- 20] What are the techniques of Intra-Operative Radiation and what is its role in treatment of cancer?

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# MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 GENERAL SURGERY

PAPER-IV: GENERAL SURGERY, OPERATIVE SURGERY INCLUDING RECENT ADVANCES

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Lasers and Staplers in surgery.
- 12) Recent advances in the management of Carcinoma Breast.
- Stage carcinoma Recto-sigmoid and write in detail about its management.
- 14) Recent trends in Bariatric Surgery.
- 15) Genetic and molecular basis of thyroid cancer.
- 16) Write in detail about surgery in chronic pancreatitis.
- 17) Recent trends in the management of varicose veins of lower limb.
- 18) Liver transplantation indications and management.
- 19) Describe the role of simulators in the surgical training.
- 20) Comparative study of Laparoscopic surgery with Robotic surgery.

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# MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 ORTHOPAEDICS

PAPER-IV: RECENT ADVANCES IN OPERATIVE SURGERY

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Role of Illizarov's fixator in deformity correction.
- 12) Biodegradable implants.
- 13) Role of muscle pedicle grafts.
- 14) Revision Knee Arthroplasty. Discuss recent developments.
- 15) Computer assisted navigation in Orthopaedic Surgery.
- 16) Investigations and management of Radial Nerve Injury.
- 17) Surgical site infection. Discuss preventive strategies.
- 18) Cartilage Culture and its clinical applications.
- 19) Recent trends in the management of injuries of cervical spine.
- 20) Current concepts in management of osteosarcoma of lower and femur in a 17 year old boy.

# MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 OPHTHALMOLOGY

PAPER-IV: RECENT ADVANCES

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe recent trends in the management of Keratoconus.
- 2) Recent advances in the management of Posterior Uveitis.
- Role of UBM and OCT in the diagnosis of Anterior Segment Eye Diseases.
- 4) Recent Advances in Surgical treatment of Macular hole.
- 5) Recent techniques in the diagnosis of Glaucoma.
- 6) Role of Immunosuppressants in Ophthalmology.
- 7) Transcanalicular Laser Dacryocystorhinostomy.
- 8) Describe the Principles of Achieving Emmetropia in Modern Day Cataract Surgery.
- 9) Recent advances in the management of Retinitis Pigmentosa.
- 10) Write short notes:
  - a) Transpupillary Thermotherapy
  - b) Fematosecond Laser

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# MS DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 OTORHINOLARYNGOLOGY

### PAPER-IV: OPERATIVE SURGERY AND ALLIED CLINICAL SUBJECTS CONNECTED TO ENT

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Define Sleep apnoea syndrome. Enumerate the causes and discuss its management.
- 12) Describe the surgical technique and complications of Schwartz Operation.
- 13) Discuss various routes and spread of Cholesteatema and details of its surgical management.
- 14) Describe presenting features and management of depression fractures of frontal sinus.
- 15) Discuss the mobility disorder of Oesophagus.
- 16) Describe various facial nerve tumours, their signs, symptoms and management.
- 17) What are the indications of 'Moors Lateral Rhinotomy'? Mention some of its complications.
- 18) How do you manage a case of persistent otorrhoea even after prolonged antibiotic therapy?

- 19) Role of Radioactive isotopes in ENT lesions.
- 20) What are the advantages and disadvantages of endoscopic ear surgeries?

# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 ANATOMY

PAPER-IV: NEUROANATOMY AND EMBRYOLOGY

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Foldings of embryo.
- 12) Describe the development of vertebrae.
- 13) Development of uterus and its anomalies.
- 14) Draw and label the sections of spinal cord at different levels -
- 15) Development of skin and its appendages.
- 16) Name the different nuclei of thalamus mention their connections.
- 17) Give an account of basal ganglia and its connections.
- 18) Describe in detail the olfactory pathway.
- Describe the features of cerebellum, their nuclei and their connections in detail.
- 20) Classify fibers of cerebrum. Describe the internal capsule Mention the blood supply.

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# MD DEGREE INTERNAL ASSESSMENT EXAMINATIONS – DECEMBER, 2014 D.V.L.

PAPER-IV: DERMATOLOGY IN RELATION TO OTHER SYSTEMIC DISEASES

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Salient dermatological manifestations and their treatment modalities in systemic sclerosis.
- 12) Oral manifestations of skin diseases.
- 13) Gene therapy in dermatology.
- 14) Nail changes and nail disorders among the elderly.
- 15) Lasers in dermatology.
- 16) Necrobiosis lipoidica.
- 17) Erythropoietic Protoporphyria (EPP).
- 18) Newer antihistamines.
- 19) Recent advances in the pathogenesis of psoriasis and its applications in the management.
- 20) Vaccines in leprosy.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 HOSPITAL ADMINISTRATION

PAPER-IV: Administration of clinical and Non-Clinical Services and Administrative procedures

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss role of MIS in Hospital Administration.
- 12) Value added services in hospitals.
- 13) What is performance appraisal system? How do you plan it in Staff Nurses of a tertiary care hospital?
- 14) END-OF-LIFE CARE.
- 15) Mention in brief statutory requirements for a radiology department.

  Discuss issues related to quality control.
- 16) Hospital signages.
- 17) Discuss management of medico legal cases in a Multi Speciality Hospital.
- 18) Manifold service.
- 19) Describe Electronic Medical Records. How do you organize them in a 1000 bedded hospital?
- 20) Quality assurance of Laboratory Services.

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – DECEMBER, 2014 EMERGENCY MEDICINE

#### PAPER-IV:

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

- An 18-month-old Bangladeshi child presents with a previously undiagnosed dislocation of hip. The child is presented to emergency unit as the child is crying and not taking feeds. The routine investigations reports are as follows: Hb, 9.5gm/d1; WBC, 8000/cu.mm; Platelet count 2 lakh/cu.mm; MCV, 67fl; MCH, 22PG; Reticulocytes, 1%.
  - a) What does the full count show?
  - b) What is the differential diagnosis and what further investigations you ask for?
  - c) What is the likely diagnosis and underlying genetics?
- 2) A 2year old male child presented as an emergency with a traumatic laceration of his palate requiring repair. A standard RSI (Rapid Sequence Intubation) is undertaken. At the end of 1 hour procedure he fails to subsequently obtained: Serum cholinesterase, 663U/L (ref.range 650-1450; Floride no. 17; Dibucaine no. 16.
  - a) Please explain what these tests indicate?
  - b) What is the diagnosis and likely underlying genotype?
  - c) How do you plan to treat?
- 3) a) Pathophysiology of Hyaline membrane disease.
  - b) Physiology of surfactant in short.
  - c) Comment on altered lung volumes in NRDS.
- 4) A 10-year old child presented to emergency unit for the first episode of seizure activity.
  - a) How do you plan to manage?
  - b) How do you evaluate?
  - c) What is the algorithm do you like to follow?
- 5) A 5-year old child presents to emergency unit with inspiratory stridor
  - a) Clinical features and flow-volume loop patern in inspiratory stridor
  - b) Mechanism of negative thoracic pressure pulmonary edema.
- 6) Mechanism of tachyarrhythmia in Wolf-Parkinson-White syndrome. How do you manage a symptomatic WPW syndrome with hypotension?
- 7) Write in short about rationale management principles of a 12-year old child sustained head injury with CT san diagnosis of Extradural

- hematoma.
- 8) Gastric tonometry (principle) and application of it in paediatric intensive care.
- 9) Mechanism of features of Addisonian crisis. Mechanism of management principles in acute adrenal insufficiency.
- 10 Hypokalemic periodic paralysis (clinical evaluation, ECG features, principles of management).

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - DECEMBER, 2014

#### TRANSFUSION MEDICINE

# PAPER-IV: RECENT ADVANCES IN TRANSFUSION TECHNOLOGY AND HAEMOTHERAPY

TIME: 3 HOURS Max.Marks:

100

NOTE: Answer All Questions

All Questions Carry Equal Marks

Draw a neat and labeled diagrams wherever necessary

- 1) Discuss the measures to prevent incorrect blood transfusion.
- 2) Chemi luminescence Technology in Transfusion Medicine.
- 3) Emerging viral infections in Transfusion Medicine.
- Describe the care to be taken to decrease inappropriate use of blood components during surgery.
- 5) Blood inventory management.
- 6) Cultures R.B.C.
- 7) Transfusion audit.
- 8) Quality indicators in Transfusion Medicine.
- 9) Informed consent and Blood Transfusion.
- 10) Enumerate the measures to be taken to reduce risk of transfusion Transmitted Infections.

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Hypoxia and effects of Hypoxia on CNS.
- 2. Newer Cephalosporins.
- 3. Assessment of Glomerular Filtration Rate.
- 4. Draw the diagram of conduction system of the heart, write about Preexcitation syndrome.
- 5. Discuss the common oncogenes altered in human cancers.
- 6. Discuss complement deficiencies and associated diseases.
- 7. Pulmonary Function Tests.
- 8. What is the mechanism, co-ordination and activators of emesis.
- 9. Atypical mycobacteria.
- 10. Vascular supply of Cerebellum.

# OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Rh isoimmunization and its clinical importance in obstetrics.
- 2) Briefly enumerate the anatomy of pelvic ureter and its significance in gynaecological surgeries?
- 3) Mention various uterine anomalies and their complications.
- 4) Preconceptional councelling and its clinical importance in obstetrics.
- 5) Discuss the abnormalities of lactation.
- 6) Discuss the pathogenesis of edema in pregnancy.
- 7) What is the role of pineal gland in Obstetrics and Gynaecology?
- 8) Describe the flora of vagina and natural barriers of infection in female.
- 9) Importance of alpha-fetoproteins in obstetrics.
- 10) Write short notes on:
  - a) GnRH analogues
  - b) Gartners cyst

### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max.

Marks:100

Note: Answer all questions.

All questions carry equal marks.

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe the mechanism of closure of patent ductus arteriosus.
- 2) T wave interpretation in Pediatric ECG.
- 3) Classification of cytokines.
- 4) Pathogenesis of cerebral oedema.
- 5) Syndromes involving III, IV, VI cranial nerves.
- 6) Discuss the biochemical changes in protein energy malnutrition dehydration in an infant with severe malnutrition.
- Discuss the bilirubin metabolism and enumerate causes of pathological jaundice in a newborn.
- 8) Discuss the pathophysiology and management of Nephrotic Syndrome.
- 9) Discuss the factors of growth in children and enumerate causes of short stature in children.
- 10) Discuss the mechanism of clotting and management of a child with haemarthrosis.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe maplesons breathing systems.
- 2) What is the importance of Anaesthesia Charts? Describe automation of anaesthesia records system.
- 3) Describe briefly Medico Legal aspects of Anaesthesia practice.
- 4) Mention the causes of hospital acquired infections (HAI). How will you plan for prevention of HAI in ICU?
- 5) Write briefly about sevoflurane pharmacodynamics. Mention the complications of sevoflurane.
- 6) Write about 'Glassgow Coma Scale'. What is the importance to the anaesthetists?
- 7) What are pulmonary function tests? Discuss their clinical importance in pre and post operative care.
- 8) Write down the anatomy of Brachial Plexus, the procedure of performing inter scalene block, its complications and management.
- 9) Define Morbid Obesity. What are the physiological changes and their importance in anaesthesia?
- 10) Discuss the safety devices in Anaesthesia machine.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 PATHOLOGY

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Role of Lysosomes in Health and Disease.
- 2) Write biochemical features and mechanisms of Apoptosis.
- 3) Discuss the Inborn errors of Metabolism.
- 4) Discuss wound healing by secondary intention.
- 5) Enumerate various special stains used for diagnosis of fungi.
- 6) Pathology of Multiple organ failure Syndrome.
- 7) Write various prognostic markers in cancer.
- 8) Discuss the utility and role of autopsy in pathology practice.
- 9) Discuss the neuropathology of Hypoxia.
- 10) Discuss pathogenesis and pathology of Gaucher's disease.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 RADIO DIAGNOSIS

### Paper-I – Basic Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the various interactions of X-ray photons with matter and their applications in Diagnostic Radiology.
- 2) Identification of Broncho Pulmonary segments of Frontal and Lateral chest radiographs.
- 3) Discuss principles and techniques of fusion imaging.
- 4) A 45 year old male patient presented with acute epigastric pain. Enumerate causes and discuss in detail imaging features of acute pancreatitis.
- 5) Describe the anatomy of paranasal sinuses.
- 6) What are methods of radiation prevention in nuclear medicine department?
- Patho Physiology and the temporal evaluation of intra cerebral bleed and its influence on imaging.
- 8) Compare Computerized Radiography versus Digital Radiography. Briefly mention their advantages and disadvantages.
- 9) Newer advances in Ultrasonography and their basic Physical Principles.
- Describe the Image Intensifier Fluoroscopy system and its applications in a Modern Radiology Department.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Pulmonary circulation.
- 2) BAL in ILD.
- 3) Development of Lung and its congenital anomalies.
- 4) Mechanism of Mucociliary clearance.
- 5) Acid fast staining (Z-N).
- 6) Ventilation perfusion.
- 7) Rifabutin.
- 8) Newer Anti-tuberculosis drugs.
- 9) Abraham punch biopsy needle.
- 10) Non-Respiratory functions of lung.

Max.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014

### **MICROBIOLOGY**

Paper-I: General Microbiology and Immunology

Time: 3 Hours Marks:100

Note: Answer all questions

All questions carry equal marks

- 1) Write the differences between exotoxin and endotoxin. Write the clinical features of gram negative septicaemia. What are the tests available for endotoxin? Write the uses of toxins in microbiology.
- 2) Define antibody. Draw the diagram of immunoglobulin. How do you culture monoclonal antibodies in the lab. What are the uses of monoclonal antibodies in the diseases?
- 3) Write in detail about immunotherapy. Its role in malignancies.
- 4) Write in detail about automation in culture methods in diagnostic microbiology.
- 5) Discuss the recent developments in sterilization and their clinical applications.
- Write in detail about quality control programme for clinical microbiology laboratory.
- 7) Write an essay on type I hypersensitivity.
- 8) Write in detail about Mutations in bacteria.
- 9) Write about the complement pathway.
- 10) Primary immuno deficiency disorders.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Differentiate between control, elimination and eradication.
- 2) Differentiate between chemoprophylaxis and chemotherapy.
- 3) Describe the criteria and validity of screening tests.
- 4) Vaccine vial monitor (VVM).
- 5) Window period.
- 6) Different types of families and role of family in health and disease.
- 7) Different phases of disaster management.
- 8) Changing concept in Public Health.
- 9) Role of mental health in community medicine.
- 10) Discuss the role of qualitative research methods in public health.

### **PSYCHIATRY**

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Neuropeptides.
- 2) Evoked potentials.
- 3) Physiology of sleep.
- 4) Parietal lobe functions.
- 5) PET Scan.
- 6) Projective tests.
- 7) Instrumental conditioning.
- 8) Student t Test.
- 9) Genetics in Psychiatry.
- 10) Social learning theory.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

1) Describe in detail the structure and functions of glycosaminoglycans.

2) Principle and applications of Chemiluminescence.

3) Define Km value and give its significance.

4) Write an account of spectrophotometry.

5) Renal regulation of Acid base balance.

6) Discuss the techniques used for elucidating the sequence of aminoacids in a

protein and write an account of the criteria of purity for proteins.

7) What are the various factors influencing the enzyme action with suitable

examples.

8) Describe the chemical composition and structural organization of the molecule

in skeletal muscle. Describe how the production of ATP is regulated according

to the need.

9) Biological variation.

10) Transfer of material and information across the cell membrane.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Type I and Type II errors in statistics.
- 2) Pharmaco vigilance.
- 3) Chi-square test.
- 4) Essential drug concept.
- 5) Novel routes of drug delivery.
- 6) Bioequivalence of drugs.
- 7) Therapeutic exploratory trials.
- 8) Recombinant DNA Technology.
- 9) Ethics committee and its responsibilities.
- 10) G-Protein Coupled Receptors.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 FORENSIC MEDICINE

Paper-I : Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe blood supply of Heart. Add a note on the autopsy features of sudden death medico legal importance.
- 2) Discuss the process of healing of fracture of bone.
- 3) Enumerate the Transfusion Hazards.
- 4) Clinical medico legal aspects of Brain death.
- 5) Discuss the Physiology of Rigor mortis.
- 6) Medico legal importance of fracture of neck of femur.
- 7) Describe pathophysiology of shock.
- 8) Describe the process of mummification.
- 9) How Pelvic bone helps in determining the age of an individual?
- 10) How will you proceed to examine a bundle of bones?

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 PHYSIOLOGY

Paper-I: General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

- 1) Active and Passive Transport.
- 2) Neuro-Muscular Junction and Drugs acting on Neuro-Muscular Junction.
- 3) Inter Cellular Junction.
- 4) Electrical activity in single unit smooth muscles.
- 5) Voltage Clamp.
- 6) Cathode ray oscilloscope.
- 7) Transcription and translation of gene.
- 8) Apoptosis.
- 9) Blotting Techniques.
- 10) Radioimmunoassay.

# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 RADIOTHERAPY

PAPER-I: BASIC SCIENCES - RADIATION PHYSICS

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

- 1) How is ionization radiation measured? Describe the working of a thimble chamber?
- 2) Define the terms: tissue air ration, tissue maximum ratio, tissue phantom ratio.
- 3) Write a short note on Quality Assurance?
- 4) Define the properties of beta rays? What are the depth dose characteristics of electron beams? How are they collimated? Write on the PDDs of electron beams.
- 5) Describe the muscles of mastication and describe the mechanism of Trismus.
- 6) What is Referred Otalgia? Describe the nervous pathway in a case of Ca.

  Tongue with ear ache.
- 7) What are the different methods of matching adjacent fields?
- 8) What are Percentage Depth Doses? How do they vary with field size, SSD, beam modifying devices and beam energy?
- 9) What is ALARA? Give at least 5 points how it can be applied in your hospital.

10) What is half value layer, fifth value layer and tenth value layer? What is the significance of each?

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# M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

- 1) Surgical anatomy of superficial and deep veins of the lower limb.
- 2) Hypovolaemic shock.
- 3) Aetopathogenesis of urinary calculi.
- 4) Describe the physiology of bile formation. Write the aetiopathogenesis of biliary lithiasis.
- 5) Anatomy of diaphragm and diaphragmatic hernia.
- 6) Describe the metabolic response to trauma.
- Describe the lesser sac peritoneum. Write the Pathology of pseudo pancreative cyst.
- 8) Local anaesthesia.

- 9) Describe the development of tests and congenital abnormalities.
- 10) Nosocomial infections.

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# **ORTHOPAEDICS**

Paper-I : Basic Medical Sciences

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Biochemical markers of Bone formation and resorption.
- 2) Biomechanics of Hip Joint.
- 3) Role of Bone Scan in Orthopaedics.
- 4) Effects of Thyroid in Bone mineral metabolism.
- 5) Patho-physiology of septic shock.
- 6) Synovial fluid analysis.
- 7) Tourniquet in Orthopaedics.
- 8) Antibiotic prophylaxis in Orthopaedics.
- 9) Principles of Locking Compression Plate.
- 10) Healing of Cartilage.

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#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the anatomy of Floor of Orbit and its relation to Blow out Fracture of Orbit. Write the symptoms, signs and treatment of Blow out fracture of Orbit.
- 2) Accommodation Convergence and ARC.
- 3) Describe various drug delivery systems in Ophthalmology.
- 4) Discuss Immunology of Uveitis.
- 5) Retinal diagnostic tools.
- 6) Prescription of Spectacles and their check up.
- 7) Geniculo-calcarine cortex pathway and its lesions.
- 8) Ultra sound in ophthalmology.
- 9) Vitreous supplements.
- 10) Write short notes on:
  - a) Prisms in Ophthalmology
  - b) ADIES Pupil

#### OTORHINOLARYNGOLOGYY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss physiology of speech and its implications.
- Describe the surgical anatomy of osteomeatal complex and discuss briefly the concept of FESS.
- 3) Describe the anatomy of petrous temporal bone.
- 4) Describe BERA (Brain stem evoked response audiometry) its applications.
- 5) Describe the perception of smell.
- 6) Discuss the uses of LASER in management of ENT diseases.
- 7) Discuss the retropharyngeal space anatomy with its surgical importance.
- 8) Discuss the topographic tests for facial nerve paralysis.
- 9) Describe the pharmacology of local anaesthetic agents in E.N.T.
- 10) Different types of fungi in E.N.T. diseases. What are their roles?

#### ANATOMY

# Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe the surgical anatomy of Prostate gland.
- 2) Tracheostomy indications, procedure and complications.
- 3) Intervertebral disc and its clinical anatomy.
- 4) Inguinal Canal and its applied and surgical importance.
- 5) Palatine Tonsil Applied Anatomy.
- 6) Cardiac plexuses.
- 7) Surgical and applied aspects of SCALP layers.
- 8) Describe the blood supply and lymphatic drainage of stomach and its applied aspects.
- 9) Cervical Rib.
- 10) Lumbricals of the hand, nerve supply and applied anatomy.

#### D.V.L.

# Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

- Write an essay on lymphatic drainage of Male and Female genitalia and its significance in STDs.
- 2) Prenatal diagnosis of skin diseases.
- Different antigens responsible for bullous disorders in epidermis and dermoepidermal unit.
- 4) Immunofluorescence in dermatology.
- 5) Enumerate antipsoriatic drugs and write in detail about cyclosporine.
- 6) Pathogenesis of contact allergic dermatitis.
- 7) Describe melanin synthesis.
- 8) What are the types of Gel and Coombs Hypersensitivity skin reactions? Give examples.
- 9) Structure of mycobacterium leprae.

10) Describe eosinophil and its role in skin problems.

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014

#### **HOSPITAL ADMINISTRATION**

### Paper-I – GENERAL ADMINISTRATION AND MANAGEMEMNT IN HOSPITAL FIELD

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

- 1) Performance based budgeting Vs Zero Based Budgeting.
- 2) Marketing Intelligence in hospitals.
- 3) RTI Act and its implications in hospital administration.
- 4) Differentiate between performance appraisal and potential appraisal.
- 5) Discuss methodologies of cost benefit and cost effective analysis.
- 6) Enumerate Universal Principles of Administration and mention the managerial function where they will be relevant?
- 7) What do you understand by Motivation? What are the salient theories of Motivation?
- List out the steps involved in deciding to buy new equipment with special reference to monetary consideration.

- 9) Describe Delegation. How can you apply this in Hospitals?
- 10) Explain the contribution made by Henry Fayol in the field of management and administration.

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# M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION – JUNE, 2014

# EMERGENCY MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

- 1) Intracranial circulation of cerebrospinal fluid.
- 2) Write applied aspects of alveolar capillary membrane.
- 3) Commonly used approaches for internal jugular vein cannulation.
- 4) Draw a diagram of cardiac cycle. Mention the events of the heart at the beginning and end of each phase in cardiac cycle.
- 5) Recommendations for tetanus prophylaxis.
- 6) Write in short the various mechanisms by which the kidney plays a vital role in acid-base regulation.
- 7) Criteria for brain death.
- 8) Hypoperfusion syndrome.

- 9) Venturi mask.
- 10) Mention the steps of coagulation cascade. Give three examples by taking applied aspects of coagulation cascade into consideration.

#### TRANSFUSION MEDICINE

Paper-I – Basic Sciences in Applied Immunohematology and Blood Transfusion.

Time: 3 Hours Max. Marks:

100

Note : Answer all questions
All questions carry equal marks

Draw diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Anaemia of chronic renal failure.
- 2) Draw complement pathway.
- 3) Types of ELISA and principles.
- 4) Principle of PCR and its application in transfusion medicine.
- 5) Discuss molecular basis for bombay phenotype.
- 6) Mixed lymphocyte culture test.
- 7) Various methods of blood donor Hb estimation.
- 8) Mechanisms of drug induced AIHA.
- 9) Describe biosynthesis of ABO blood group antigens.
- 10) Pathophysiology of oligaemic shock and its management.

#### **GENERAL MEDICINE**

Paper-III – Disorders of Immune System, Connective Tissue and Joints, Endocrinology and Metabolism, Neurological, Poisoning etc., Oncology and Haematology.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

- 1) Regulation of the Hypothalamic Pituitary Testis Axis in Adult Men.
- 2) Late consequences of cancer and its treatment.
- 3) Classify Biologics and discuss their use in autoimmune diseases.
- 4) Discuss the drug induced musculoskeletal disorders.
- Predisposing, Precipitating and Perpetuating Factors in Chronic Fatigue
   Syndrome.
- 6) Discuss the current concepts of Incretin Based Therapy in Type-2 Diabetes Mellitus.
- Classify meningitis. Discuss clinical profile, diagnosis and complications of tuberculous meningitis.
- 8) Disorders affecting multiple endocrine systems.
- 9) Genetics and Biosynthesis of human Hemoglobin.
- 10) Classification of spinocerebellar ataxias.

# M.S.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 OBSTETRICS & GYNAECOLOGY

# Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Enumerate FIGO's classification of malignant ovarian neoplasm and their overall management?
- Discuss the various methods of permanent female sterilization, with a brief mention of associated complications.
- 3) Discuss the management of endometriosis in an infertile woman.
- 4) Discuss the diagnosis and management of nulliparous prolapse.
- 5) Enumerate the classification of vaginal fistula and discuss the management of vesico vaginal fistula.
- 6) Newer hormonal contraceptives.
- 7) What are the current concepts in etiopathogenesis of polycystic ovarian disease (PCOD)?
- 8) Discuss various sling procedures for stress incontinence.
- 9) Role of laparoscopy in gynaecology.
- 10) Write short notes on:
  - a) Metropathia haemorrhagica
  - b) Precocious puberty

# M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Management of PPHN in newborn.
- 2) Describe the complications of Measles.
- 3) Cow milk protein allergy.
- 4) Immunization in immune compromised children.
- 5) What is the WHO definition of complicated Malaria? Discuss the management of cerebral Malaria.
- 6) Discuss the problem associated with early weaning in an infant and discuss the management of 6 months old infant with severe acute malnutrition.
- Discuss symptoms and metabolism of Vitamin D and discuss diagnosis treatment of Vitamin D deficiency rickets.
- 8) Discuss the diagnosis and management of a 2 year old child with fever and jaundice.
- 9) Age independent Anthropometry and nutritional Anthropometry.
- 10) Smart nutrients.

# M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 ANAESTHESIOLOGY

Paper-III: Anaesthesialogy in relation to sub-specialities

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Discuss in detail the anaesthetic management of myasthenia gravis patient posted for thymectomy.
- 2) A ten year old child suffering from tetrology for fallot is diagnosed to have brain abscess. Outline the pre-operative management.
- 3) Anaesthetic problems of repair of congenital diaphragmatic hernia in a neonate.
- 4) Anaesthetic management of a 4 year old with foreign body in right main bronchus. Discuss the problems.
- 5) Anaesthetic management of emergency appendicectomy in a 16 weeks pregnant patient.
- 6) Mention the intra operative complications of total hip replacement. How will you prevent them?
- 7) Describe anaesthetic management in liver transplantation.
- 8) Describe pathophysiology of Myxedema. Mention about management of Myxedema coma.
- 9) Mention the factors influencing outcome of severe traumatic brain injury. How will you manage the case in Intensive Care Unit?
- 10) Write about anaesthetic management of 30 years male with moderate mitral stenosis posted for emergency fixation of fracture humerus.

# M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 PATHOLOGY

Paper-III: Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Role of FNAC in soft tissue tumors.
- 2) Lab diagnosis of bleeding disorders.
- 3) Role of Bronchial lavage in pulmonary diseases.
- 4) Recent trends in cervical cytology.
- 5) List the blood components. Discuss the methods of their storage.
- 6) Discuss lab diagnosis of meningitis.
- 7) Enumerate the transfusion reactions.
- 8) Discuss congenital dyserythropoietic anemias.
- 9) Stem cell transplantation.
- 10) Diagnostic applications of microscopic examination of urine.

# M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 RADIO DIAGNOSIS

Paper-III: Components of MD Radiognosis (Clinical Radiology related to respiratory system, cardiovascular system, musculoskeletal system and pediatrics)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss imaging features of bronchogenic carcinoma with staging.
- 2) Describe the role of imaging in rheumatoid arthritis.
- 3) Discuss the role of MR evaluation of myocardial infarction.
- 4) Describe imaging features of aortic dissection, its complications and role of interventional radiology in its Rx.
- 5) Classify bone tumors. Discuss in detail imaging feature of Ewing's sarcoma.
- 6) What is the role of imaging in benign soft tissue masses?
- 7) Pathology and the imaging features of pulmonary thrombo embolism.
- 8) Discuss the role of plain radiography in cyanotic heart disease.
- 9) Write an essay on plural mesotheliomas.
- 10) How do you evaluate a case of interstitial lung disease?

## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Acute lung injury.
- 2) Management of ventilator associated Pneumonia (VAP).
- 3) Non specific interstitial pneumonia (NSIP).
- 4) Etiopathogenesis and management of Cor pulmonale.
- 5) Pathogenesis of bronchial asthma.
- 6) Congenital bronchiectasis.
- 7) Pancoast syndrome.
- 8) Gene-therapy in Cystic fibrosis.
- 9) Types of respiratory failure and its management.
- 10) Sleep apnoea syndrome.

## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Classify Herpes viridae. Write in detail about pathogenesis and lab diagnosis of diseases caused by Epstein-Barr viruses.
- 2) Write in detail about lab diagnosis of Falciparum malaria. Add a note on malarial vaccines.
- 3) Describe the Pathogenicity and Lab diagnosis of Cryptococcus neoformans infections.
- 4) Write about emerging viral infections.
- 5) Discuss the epidemiology of dermatophyte infections in India. Write about laboratory diagnosis of common dermatophytic infections.
- 6) Discuss the pathogenesis and newer diagnostic methods of cystic echinococcosis.
- 7) Discuss regarding Entamoeba histolytica life cycle, complications, lab diagnosis and add a note on treatment modalities.
- 8) List out arthropod born viral diseases. Write about Dengue viruses, pathogenesis, lab diagnosis and add a note on management and prevention.
- 9) Describe pathogenesis and lab diagnosis of mucor mycosis.
- 10) Write an essay on penicilliosis marneffei.

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## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning, Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Indoor air pollution.
- 2) Child guidance clinic.
- 3) Pneumoconiosis.
- 4) What is cafeteria approach? Write in detail about different types of IUDs?
- 5) Agricultural hazards to farmers.
- 6) Safe and wholesome water.
- 7) Evaluation of family planning program in India.
- 8) Mosquito control measures.
- 9) Indicators of Maternal health.
- 10) Describe the health problems in Information Technology professionals.

## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Psychiatric manifestations of hypothyroidism.
- 2) Puerperal psychosis.
- 3) Varenicline.
- 4) Generalized anxiety disorder.
- 5) Psychosocial issues in disaster afflicted population.
- 6) Social cognition in Schizophrenia.
- 7) Somatoform disorders.
- 8) Assessment of suicide risk.
- 9) Emergencies in psychiatry.
- 10) Maintaining abstinence in alcoholics.

## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 BIOCHEMISTRY

Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Regulation of calcium metabolism and disorders associated.
- 2) Explain the role of essential fatty acids in the body.
- 3) Metabolic changes in Type I diabetes mellitus.
- 4) Dietary fibre.
- 5) Explain why vitamin D is a hormone.
- 6) Discuss the second messenger mechanism of G-protein in signal transduction.
- 7) What is specific dynamic action? Give SDA value of protein and importance of protein in human diet.
- 8) Biological antioxidants.
- 9) Thyroid function tests.
- 10) Absorption of iron and its regulation.

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#### PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Antiplatelet Drugs.
- 2) Discuss the recent advances in the treatment of AIDS.
- 3) Glucocorticoid synthesis inhibitors.
- 4) Drug therapy of XDR tuberculosis.
- 5) Anti-progestins.
- 6) Anti cancer antibiotics.
- 7) Insulin analogues
- 8) Mechanism of antimicrobial drug resistance.
- 9) Biological response modifiers.
- 10) Neuraminidase inhibitors.

## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 FORENSIC MEDICINE

Paper-III : Forensic Medicine Proper

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

1) Intra Uterine Sex determinations and its Medico legal importance.

 Autopsy in a case of death due to HIV. Mention about the procedure and precautions to be followed doing autopsy.

- 3) Alcohol intoxication and criminal behavior. Mention a note about it.
- 4) Write the functions of Forensic Science Laboratory.
- 5) Medico legal importance of Bone age.
- 6) Importance of Forensic Entomology in determination of time of death.
- Classify sexual offences without using terms like natural, unnatural. Discuss the psychology behind sexual perversions.
- 8) Describe the medical and medicolegal classifications of injuries (HURT).
- 9) Discuss about the tetanus and write a note about autopsy in a case of tetanus
- 10) Discuss the causes, diagnosis and autopsy findings of food poison.

## M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Cardiac cycle.
- 2) Regulation of Blood Pressure.
- 3) Cerebral circulation and factors influencing cerebral circulation.
- 4) Chemical regulation of respiration.
- 5) Acclimatization to High altitude.
- 6) Synapses types.
- 7) Functions of limbic system.
- 8) Basal Ganglia.
- 9) Theories of colour union.
- 10) Mechanism of hearing.

#### M.D.DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 RADIOTHERAPY

Paper-III: Gynecological Malignancies, GI Malignancies, Hepatobiliary, Uro Genital,
Bone Tumours, Soft issues Skin and Appendages, Benign Tumours

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- What are the indications for post operative radiation in ca cervix? What are the target volumes doses and treatment options in a patient with stage IIB inadvertently operated.
- 2) Interstitial brachytherapy for a ca anal canal what are the indications, techniques and complications.
- 3) What are the indications of radiation in ca endometrium? Classify according to stage and grade of the tumor?
- 4) What are the indications for radiation in ca stomach? What are the various techniques of radiation?
- 5) What are the indications for adjuvant radiation in RCC? What are doses and planning techniques?
- 6) What are the different radiation schedules in the management of bone metastasis? What are effective methods of management of bone involvement in well differentiated thyroid cancers, ca prostate, and multiple myeloma?
- 7) Describe hormonal management in metastatic prostate cancer.
- 8) What is the management of 2x2 cm lesion on the Glans Penis of a 35 year old man who refused surgery?
- 9) What are the recent advances in chemotherapy in RCC?
- 10) Describe WHO classification of Soft Tissue Sarcomas.

## M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Discuss the etiology clinical features and management of hypoparathyroidism.
- 2) Describe the clinical features and management of ruptured spleen.
- 3) Describe the etiology of gastric outlet obstruction in different age groups and discuss in detail about its management.
- 4) Discuss the classification and management of benign breast diseases.
- 5) Classify head injuries and describe the mechanism, clinical features and management of traumatic intracranial hemorrhage.
- Describe the management of secondary node in the neck with unknown primary.
- 7) Classify soft tissue sarcoma. Write in detail about synovial cell sarcoma.
- 8) Discuss in detail about etiology, clinical features, pathophysiology and management of intestinal obstruction.
- 9) Describe the clinical features and management of Portal Pyaemia.
- Discuss the etiology, pathology and the clinical features and management of BPH.

## M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Giant Cell variants and management of GCT.
- 2) Triple deformity of the knee.
- Hand deformities in Rheumatoid arthritis, patho-anatomy and treatment of Boutonniere's deformity.
- 4) Sprengel's shoulder.
- 5) Rigid Club Foot.
- 6) Principles of Tendon transfer.
- 7) Lumbar canal stenosis.
- 8) Principles of Arthroscopy.
- 9) Clinical features investigations and management of CDH.
- 10) Short wave diathermy.

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## M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 OPHTHALMOLOGY

Paper-III: Conjunctiva, cornea sclera, lens, glaucoma, uvea, retina, vitreous, squint.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Management of Paediatric Cataract.
- 2) Diagnosis and management of Neovascular Glaucoma.
- 3) Describe aetiology, clinical features and treatment of Herpes Simplex Keratitis.
- 4) Etiology, investigation and management of infantile Esotropia.
- 5) Dry Eye.
- 6) Marginal corneal ulcers and management of Mooren's ulcer.
- 7) How do you investigate a case of sudden loss of vision in a man aged 50 years?
- 8) Management of vitreous haemorrhage.
- 9) Describe systemic associations of panuveitis.
- 10) Describe the various etiological causes of horizontal gaze abnormalities.

#### M.S. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014

#### OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Enumerate causes of stridor in infants and children. Discuss management of subglottic stenosis.
- 2) Define sleep apnoea? Describe the causes and management.
- 3) Discuss the causes and management of unilateral vocal cord paralysis.
- 4) Name complications of chronic suppurative otitis media and discuss briefly about labyrinthitis.
- 5) Describe the management of a deaf mute child.
- 6) Discuss the differential diagnosis of unilateral nasal mass and outline the management of one of them.
- 7) Write in detail the surgery of Trans sphenoidal hypophysectomy.
- 8) Enumerate the complications of Tracheostomy.
- Write in detail the clinical features and various investigations for Meniere's disease.
- Describe the aetiology, signs and symptoms and management of oroantral fistula.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the microscopic variations in the mucosa of various parts of gastrointestinal tract.
- 2) Discuss the sex linked inheritance in human genetics.
- Describe the histology of kidney and discuss in detail the structure of convoluted tubules.
- 4) Different methods of mounting of Museum specimens.
- 5) Describe the procedure for preparation of histological slide from paraffin block to Haematoxylin and Eosin staining.
- 6) Histology of pituitary gland with its functional correlation.
- 7) Chromosomal abnormalities.
- 8) Ultra Microscopic structure of Skeletal Muscle.
- 9) Fixatives.
- 10) Describe the methods of Embalming of a Cadaver and give the composition of Embalming fluid.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014

#### D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) What are the various drugs used in the treatment of leprosy. Write about dapsone syndrome.
- 2) Eye involvement in leprosy.
- 3) Enumerate diagnostic and prognostic tests of Leprosy and write in detail about histopathology.
- 4) Type 2 Lepra Reaction, pathogenesis, systemic manifestations and management.
- 5) Screening and diagnosis of STIs and HIV in pregnancy.
- 6) Syndromic approach of STIs and RTIs its role in control of STIs and HIV.
- 7) Genital ulcer in male with a history of contact with an unknown partner of 30 days duration. Discuss the clinical possibilities, investigations and management.
- 8) Congenital syphilis.
- 9) Late complications of LGV.
- 10) Pneumo cystis jiroveci pneumonia.

#### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014

## HOSPITAL ADMINISTRATION Paper-III— Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Permissions and Licenses required before commissioning of a new hospital.
- 2) Green Building Vs Brown Building.
- 3) Zoning concept while planning for operation theatres (OT).
- 4) Planning Neonatal ICU.
- 5) Explain scope and significance of Telemedicine. Describe the process and technical requirements and application fields in Medicine.
- 6) Discuss the issues in press and Medical Relations management.
- 7) Discuss the critical factors in the Energy Management in the hospital setting.
- 8) Biomedical waste management Handling Rules, 2011.
- Define Medical Audit. Describe Medical audit process in the hospital. Discuss the advantages and disadvantages.
- 10) Enumerate hospital hazards. Discuss the planning considerations in view of fire safety in the Tertiary care hospital.

### M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 EMERGENCY MEDICINE

#### Paper-III – Recent Advances in Critical Care

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) What are the clinical, radiological features of extradural hematoma after head injury? How do you plan to manage this patient at Emergency trauma unit?
- 2) How do you evaluate a patient with crush injury thigh? What are the anticipated (specific) problems? What specific monitoring do you like to look for?
- 3) How do you diagnose (clinically) an upper airway obstruction? What are the criteria to fulfill a case of respiratory distress? Briefly write about negative thoracic pulmonary edema and its management.
- 4) Write short notes on measurement of intra abdominal pressure and its application in surgical cases (pre, intra, post operative cases).
- 5) Ankle block in minor operation room for debridement of foot injury.
- 6) Rapid sequence intubation at Emergency medicine and trauma unit.
- 7) Differences between FAST and DPL.
- 3) 18 year college student brought to ER with skid and fall from 2 wheeler with swelling of mandible. GCS on arrival E3V4M5. Describe ED management and Leforts classification.
- 9) Explain the approach to patient with spinal injury. Describe about spinal and neurogenic shock.
- 10) 35 year old male shot by police during an encounter in right hypochondrium was brought to ER with unstable hemodynamics, describe in detail emergency management.

## M.D. DEGREE INTERNAL ASSESSMENT EXAMINATION - JUNE, 2014 TRANSFUSION MEDICINE

Paper-III – Blood Donor Organization, Technology of Components, Clinical Hemotherapy.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Describe the massive transfusion protocol.
- 2) Adverse reactions during apheresis.
- 3) Discuss the quality control methods used for blood components.
- Describe the leucodepleted blood products, their indications and quality control.
- 5) National Blood Policy.
- 6) Paternity testing.
- 7) Transfusion support of IgA deficiency.
- 8) Bacterial contamination of platelets.
- 9) Compare and contrast TRALI & TACO.
- 10) Blood transfusion in sickle cell anaemia.

## M.D. DEGREE EXAMINATION - OCTOBER, 2014

## GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Metabolism of Bilirubin with approach to a patient with Hyper Bilirubinemia.
- 12. Coagulation cascade.
- 13. Adverse effect of blood transfusion.
- 14. Role of Kidney and Lung in maintenance of PH of blood.
- 15. Vaccination in old age.
- 16. Monoclonal anti bodies.
- 17. Mitochondrial DNA.
- 18. Role of antidiuretic hormone.
- 19. Physiology of sleep and disorders of sleep.
- 20. Tumour markers.

### M.S. DEGREE EXAMINATION - OCTOBER, 2014

## OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Describe the development of vagina and its anomalies.
- 2. Discuss the role of  $\beta$ -hCG (Human chorionic gonadotrophin) in Obstetrics & Gynecology.
- 3. Describe the iron metabolism in pregnancy.
- 4. Discuss the pathogenesis of endometriosis.
- 5. Describe the pathology of germ cell tumours of ovary.
- 6. Discuss the role of antihypertensives in pregnancy with hypertension.
- 7. Write short notes on
  - a) Misoprostol
  - b) Gestrinone
- 8. Discuss the diagnosis and effects of Human immunodeficiency virus (HIV) infection in pregnancy.
- 9. Discuss the role of Folic acid in pregnancy.
- 10. Write short notes on:
  - a) Pap smear
  - b) Internal iliac artery and its importance

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## M.D. DEGREE EXAMINATION -OCTOBER, 2014

#### **PAEDIATRICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41. Enumerate factors that cause pulmonary vasoconstriction and pulmonary vasodilatation in neonates and describe the pathophysiology of persistent pulmonary hypertension of new born.
- 42. Discuss the daily requirement, role and assessment of adequacy of vitamin D in children.
- 43. Discuss the use of Anticoagulants and Thrombolytics in children.
- 44. Discuss the pathophysiology and management of Supraventricular tachycardia.
- 45. Describe the statistical tests that are used to evaluate a new diagnostic test.
- 46. Describe the pathogenesis of Glomerular diseases in children.
- 47. Describe the mechanism of action and side effects of drugs used to treat steroid resistant Nephrotic syndrome.
- 48. Enumerate the causes of Congestive heart failure in children and describe mechanism of action of drugs used for its treatment.
- 49. Describe Molecular diagnostic techniques for detecting pathogens.
- 50. Describe the diagnosis and treatment of Hyperkalemia in children.

# M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Describe the anatomy of the Epidural space. Discuss the complications of spinal and epidural anaesthesia.
- 12. What are the common problems encountered during Anaesthesia for Geriatric patients.
- 13. Discuss the causes of delayed recovery after General anaesthesia and the management.
- 14. What is conservation of blood during surgery? Discuss in detail the various methods adopted in practice.
- 15. What are the different types of anaesthesia circuits and discuss in detail the various circuits in clinical use.
- 16. Define Total intravenous anaesthesia (TIVA). Mention the various agents used in clinical practice.
- 17. Discuss the Preanesthetic assessment clinic and its usefulness.
- 18. Discuss awareness during anaesthesia and mention the monitors used to measure the depth of anaesthesia.
- 19. Describe the anatomy of the Tracheobronchial tree and their Anaesthetic significance.
- 20. With the help of a diagram discuss Neuromuscular transmission.

#### M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 114. Describe components, functions and the role of Complement in health and disease.
- 115. Describe Pathophysiology, Genetic basis and significance of Apoptosis.
- 116. Ischemic / Hypoxic cell injury.
- 117. Describe the defects in Protein folding.
- 118. Classify and describe the defects in Leucocyte function.
- 119. Stem cell transplantation.
- 120. Discuss the molecular events in cell growth.
- 121. Discuss Angiogenesis.
- 122. Fragile X syndrome.
- 123. Describe the various techniques in Gene diagnosis.

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 RADIO DIAGNOSIS

Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 104. Describe about the radiation protection and personnel monitors used in the radiation safety.
- 105. Describe the various types of skeletal Dysplasia with radiological and imaging features.
- 106. Cardiac CT angiogram.
- 107. Write short notes on:
  - a) MRA b) Artifacts in radiography c) Towne's view d) HIDA scan
  - e) Role of ultrasound in rotator cuff tear
- 108. Perthes disease.
- 109. MRCP.
- 110. Imaging of spinal cord tumors.
- 111. Write about intravascular contrast media.
- 112. Principles of MDCT.
- 113. Write short notes on:
  - a) GOUT

- b) Classify bone tumors
- c) Pneumatic reduction of intussusception d
- d) Acroosteolysis

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) Role of Eosinophils in pulmonary diseases.
- 42) Bronchoalveolar lavage (BAL) Clinical utility and applications.
- 43) Diffusing capacity ( $DL_{\infty}$ ).
- 44) The "Indirect" Radiological signs of collapse.
- 45) 6 minute walk test (6MWT).
- 46) Compensation in Metabolic Acid-Base disorders.
- 47) Pulmonary Surfactant role in lung physiology and clinical utility.
- 48) Upper airway resistance syndrome and its complications.
- 49) Pathophysiology of Hyperinflation.
- 50) Respiratory complications of Malaria.

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

109. NK cell and its role in immunological

defence.

110. Recent development in automation

in Microbiology.

111. Role of Gas-liquid chromatography

in bacterial diagnostics.

112. Role of mass-spectrometry in rapid

bacterial identification.

113. Procalcitonin and its role in sepsis.

114. Acute phase reactants and its role

in diagnostic Microbiology.

115. Autoimmune markers in Diagnostic

immunology.

116. Role of Rapid ICT based tests in

diagnostic Microbiology.

117. Role of Microbiologist in formulation

of Hospital antibiotic policy.

10. Handling and disposal of Biomedical waste in a hospital.

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) Describe the Social and Behavioral determinants of Health and Disease. How are the principles of these sciences applied in Disease control?
- 42) Define Safe water. Elaborate the water related diseases.
- 43) Enumerate the various methods of Waste disposal. Write a note on Mechanical composting.
- 44) Elaborate on the Disability rates used as indicators of health.
- 45) What are the Nutritional challenges in India? How can Multi sectoral approach help to solve Nutritional problems?
- 46) Write briefly on the 'Determinants of Health'.
- 47) Write a note on levels of prevention.
- 48) Undertake Critical analysis of Millennium development Goals in view of the progress of the program in India till date.
- 49) What impact does Industrialization and Urbanization have on health?
- 50) Describe Family life cycle.

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Description, procedure and uses of the Wisconsin card sorting test.
- 12) Contributions of Conrad Lorenz.
- 13) Humanistic Psychology.
- Dependency needs in the context of Psychotherapy in the Indian context.
- 15) Attitudes, attitude formation, and its relevance to Psychiatry.
- 16) Child rearing practices and Psychopathology.
- 17) Linkage analysis in Psychiatry.
- 18) Synthesis, metabolism and pathways of Serotonin in the brain.
- 19) Structure and connections of the Cerebellum.
- 20) Intraneuronal signaling pathways and Psychotropic drug action.

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) Name various blotting techniques and their significance.
- 42) What is ELISA? Write the principles of ELISA and two clinical applications in clinical diagnosis.
- 43) What are Coenzymes? Describe the role of Coenzymes in enzyme action.
- 44) What are Phospholipids? Describe the classification and functions of Phospholipids.
- 45) Colloids and their properties.
- 46) Describe PCR in HIV antigen testing.
- 47) DNA library.
- 48) Applications of Recombinant DNA technology.
- 49) What are saturated solution, normal solution and percent solution? How are they prepared in laboratory?
- 50) Classify Chromatography and explain HPLC.

## M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### **PHARMACOLOGY**

Paper-I: Pharmacology General Principles and Experimental Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

## WRITE SHORT ESSAYS ON THE FOLLOWING:

109.	Signaling mechanism involved in
drug action.	
110.	Informed consent.
111.	New drug delivery system.
112.	Fixed drug combinations.
113.	Therapeutic drug monitoring.
114.	Methods to screen antiinflammatory
activity.	
115.	Pharmacogenomics.
116.	Effects of Pregnancy on drug
action.	
117.	Preventable adverse drug reactions.
10. Non-parametric tests	

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) Describe anatomy of Carotid sinus and its medico legal importance.
- 42) Radiological identification of Victims in mass disaster.
- 43) Discuss anatomy of Hyoid bone and its medico legal importance.
- 44) Discuss the patho-physiology of sudden deaths inherited through autonomic nervous system.
- 45) Discuss various tests to provide important clue in cases of Disputed paternity.
- 46) Discuss the use of radiology in cases of child abuse.
- 47) Write short note on secretors and its medico legal importance.
- 48) Discuss biochemical changes in death due to Drowning.
- 49) Write in short about Pulmonary embolism.
- 50) Write in short about Gas gangrene.

### M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### **PHYSIOLOGY**

Paper-I: General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

Draw diagrams wherever necessary All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Henderson Hasselbalch equation.
- 22) Milieu interior.
- 23) Non ionic diffusion.
- 24) Calcium sparks.
- 25) Ionic composition of body fluids.
- 26) Demarcation potential.
- 27) Metabolism in nerve fibers.
- 28) Miniature and giant end plate potentials.
- 29) Gradation of muscle response.
- 30) Mode of skeletal muscle contraction.

## M.S. DEGREE EXAMINATION – OCTOBER, 2014 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) Anatomy of femoral canal.
- 42) Anatomy and anomalies of extra hepatic biliary system.
- 43) Thyroid function tests.
- 44) Gastrin.
- 45) Microbiology of osteomyelitis.
- 46) Polymerase chain reaction.
- 47) Prophylactic antibiotics in Surgery.
- 48) Pathology of pulmonary embolism.
- 49) Carcinoid syndrome.
- 50) Local anaesthetics.

## M.S. DEGREE EXAMINATION – OCTOBER, 2014

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) 5<sup>th</sup> lumbar vertebra.
- 42) Bio-mechanics of the Hip joint.
- 43) Anterior cruciate ligament.
- 44) Blood supply of Carpal scaphoid.
- 45) Bone scan in Skeletal infection.
- 46) PTB prosthesis.
- 47) Paget's disease of bone.
- 48) Chemotherapy for Skeletal tuberculosis.
- 49) Pearson's flexion apparatus (or flexion splint).
- 50) DEXA scan.

## M.S. DEGREE EXAMINATION - OCTOBER, 2014

#### **OPHTHALMOLOGY**

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 41) Gram stain.
- 42) Principal of streak retinoscopy.
- 43) Immuno suppressive drugs in Ophthalmology.
- 44) Travoprost.
- 45) Tric virus development cycle.
- 46) T. lymphocyte.
- 47) Colour contact lenses.
- 48) Trisomy 13-21 in ocular disorder.
- 49) Fissure in the orbit.
- 50) Write about the structure of Angle of the Eye and give a note on aqueous drainage.

#### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Osteomeatal complex.
- 12) Technique of sterilization of micro instruments in ENT.
- 13) Eustachian tube functions.
- 14) Physiology of deglutition.
- 15) Non metallic tracheostomy tubes.
- 16) Subglottic space.
- 17) Sinus tympani.
- 18) Middle ear ventilating tube.
- 19) Discuss the role of imaging in otolaryngology.
- 20) P53 tumour marker.

### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Surgical anatomy of the lesser sac.
- 12) Fibromuscular skeleton of heart.
- 13) Cavernous sinus.
- 14) Axillary lymph nodes.
- 15) Achalasia Cardia and its clinical importance.
- 16) Varicose veins of lower extremity.
- 17) Pelvic diaphragm.
- 18) Carpel tunnel syndrome.
- 19) Fascial spaces of the neck.
- 20) Short lateral rotators of the hip joint.

### D.V.L.

### Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Role of cutaneous cytology in diagnosis of skin disorders.
- 12) Normal flora of the skin.
- 13) Correlation between structure and function of epidermis.
- 14) Structure of sweat gland and mechanism of sweating.
- 15) Serological tests for syphilis.
- 16) Lymphokines.
- 17) Ultrastructure of Mycobacterium Leprae.
- 18) Laboratory diagnosis of Gonorrhoea.
- 19) Slit skin smear in leprosy.
- 20) Lymphocytopenia in HIV infection.

# M.D. DEGREE EXAMINATION – OCTOBER, 2014 HOSPITAL ADMINISTRATION

Paper-I – General Administration and Management in Hospital field

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) TOWS matrix as applicable to hospitals.
- 12) Effective decision making in hospitals.
- 13) Co-ordination as essence in managing hospitals.
- 14) Barriers to effective communication in hospitals.
- 15) Maslow's need hierarchy vs Herzberg's theories of motivation.
- 16) Team building and its significance in managing hospitals.
- 17) Transaction analysis as related to healthcare organizations.
- 18) Safety stock.
- 19) Depreciation.
- 20) Cost effective vs cost benefit analysis.

#### **GENERAL MEDICINE**

### Paper-II – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Atypical pneumonia
- 12) Dermatological manifestations of systemic diseases
- 13) Goal directed therapies in sepsis
- 14) Refractory heart failure
- 15) Chronic hepatitis C
- 16) Nephrotic syndrome
- 17) Helicobacter pylori diagnosis and treatment
- 18) Drug resistant typhoid fever
- 19) Discuss pericarditis
- 20) Second line HAART

### M.S. DEGREE EXAMINATION – OCTOBER, 2014 OBSTETRICS & GYNAECOLOGY

Paper-II – Obstetrics including Diseases of New born

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 75. What are the causes of perinatal mortality? How can it be reduced?
- 76. Describe the investigations in a case of recurrent pregnancy loss
- 77. Discuss the issues in the management of epilepsy in pregnancy
- 78. Write short notes on:
  - a) Meconium aspiration syndrome
  - b) Birth injuries in new born
- 79. Discuss the current status of instrumental vaginal deliveries
- 80. Discuss the current status of intrapartum foetal surveillance
- 81. Discuss the causes and management of acute inversion of uterus
- 82. Discuss the diagnosis and management of unruptured tubal pregnancy
- 83. Write short notes on:
  - a) Use of antibiotics in first trimester in pregnancy
  - b) Investigations in jaundice complicating pregnancy
- 84. Discuss the management of coagulation failure in pregnancy

#### **PAEDIATRICS**

Paper-II – Diseases of New born, Preventive and Social Paediatrics, Growth and Development and Child Psychiatry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51. Describe the prevention and management of Hyaline membrane disease
- 52. Draw an algorithm for Neonatal resuscitation
- 53. Describe the management of Shock in Neonates
- 54. Describe the diagnostic features of Autism spectrum disorder
- 55. Describe the assessment of Muscle tone during infancy
- 56. Describe the clinical features and management of Hypoxic ischemic encephalopathy
- 57. Write the recommendations for prevention of mother to child transmission of Human immunodeficiency virus infection
- 58. Describe the beneficiaries and provisions of Janani Shishu Suraksha Karyakram.
- 59. Enumerate the causes and describe management of Short stature
- 60. Describe the recommendations and strategy of treatment of Tuberculosis in children under revised Tuberculosis control program.

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANAESTHESIOLOGY

Paper-II: Clinical Sciences in relation to Anaesthesiology including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21. What are the indications for neuro muscular blocking agents in the intensive care unit?
- 22. Describe the usefulness of simulators in anaesthesia education
- 23. Discuss the role of Anaesthetists in managing a patient for off pump coronary bypass surgery
- 24. Discuss the various methods followed to prevent Post operative thrombo embolic complications
- 25. Explain the different types of Laryngeal Mask airways with illustration. Mention the merits and demerits of various types Laryngeal mask airways in common use.
- 26. What are the recent advances in the management of Acute lung injury
- 27. Mention the commonly used immunosuppressive drugs and their interaction with anaesthetic agents
- 28. Mention the cardiac rhythm management devices. What is the anaesthetic importance for a patient with cardiac pacemaker?
- 29. Discuss the anesthetic problems involved in obese patient
- 30. What are the anaesthetic implications for a patient coming for Liver transplant surgery?

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 PATHOLOGY

Paper-II: Special Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 73. Describe the pathology of Mineral deficiencies.
- 74. Pathology of Neonatal Respiratory distress syndrome
- 75. Restrictive cardiomyopathy
- 76. Pulmonary alveolar proteinosis
- 77. Pathology of diffuse Renal cortical necrosis
- 78. Pathology of Gestational trophoblastic disease
- 79. Pathology of Bone diseases associated with abnormal bone matrix.
- 80. Aetio pathology of Rhinoscleroma
- 81. Describe the pathology of Phakomatoses
- 10. Pathology of Therapeutic interventions in Vascular diseases

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 RADIO DIAGNOSIS

Paper-II: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLWING:

- 66. Discuss the causes of acute upper abdominal pain and role of various imaging modalities
- 67. A young female presenting with acute pain in the pelvis, what are various causes? How will you evaluate Radiologically?
- 68. Write short notes on:
  - a) Psoriatic arthritis
- b) Pheochromocytoma
- c) Liver segments disease
- d) Benign tumors of kidney
- 69. Hypertrophic pyloric stenosis
- 70. Role of Color Doppler and ultrasound in post renal transplant patient
- 71. Role of ultrasound in thyroid tumors
- 72. Pulmonary sequestration
- 73. Classical signs of congenital heart disease
- 74. Pulmonary metastases
- 75. CNS manifestations in immunocompromised patients

#### PULMONARY MEDICINE

Paper-II: Pulmonary Tuberculosis – Clinical aspects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) Moxifloxacin in TB treatment
- 52) Nucleic Acid Amplification Technologies (NAAT) in TB diagnosis
- 53) Intermittent chemotherapy in TB
- 54) Bacillus Calmette Guerin (BCG) vaccine
- 55) Discuss concept of HIV / TB coinfection
- 56) Sequelae of Pulmonary tuberculosis
- 57) STAND (Shortening Treatment by Advancing Novel Drugs) trial
- 58) Immune reconstitution inflammatory syndrome
- 59) Poncet's disease
- 60) Five components of Programmatic Management of Drug Resistant TB (PMDT)

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 MICROBIOLOGY

Paper-II: Systemic Bacteriology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 77. Laboratory diagnosis of Actinomycosis
- 78. Burkholderia cepacia as emerging pathogen
- 79. Enumerate bacterial causes of Atypical pneumonia and outline their laboratory diagnosis
- 80. Give an account of vancomycin resistant Enterococus in India
- 81. Enumerate various antimycobacterial susceptibility testing methods.
- 82. Outline laboratory diagnosis of Non -fermenters
- 83. Discuss pathogenesis and laboratory diagnosis of Gas gangrene
- 84. Discuss in detail about the laboratory diagnosis of urinary tract infections
- 85. Etiology and laboratory diagnosis of Blood stream infections
- 86. Enumerate Bacterial causes of Acute abdominal infections and outline laboratory diagnosis

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-II: Epidemiology and control of diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) WHO has certified India as "Polio eradicated". Discuss the strategies to be implemented to prevent the resurgence of Polio in India
- 52) A new drug Ax has been identified to cure AIDS in phase II trials. Write a protocol for the phase III trial.
- 53) Discuss the epidemiology and prevention of tobacco related cancers prevalent in India.
- 54) Discuss the differences between Incidence and Prevalence
- 55) Describe the different approaches for Surveillance
- 56) As MO i/c of a PHC, describe how will you conduct an Audit of the immunization delivery services
- 57) Write a note on Disinfectants
- 58) Repeated outbreaks of a Dengue have occurred in the district. As the District Health Officer, describe your plan of action to prevent recurrence of the outbreak.
- 59) Discuss the National AIDS Control Programme Phase IV. What are the major changes from the earlier phases
- 60) A cohort of cancer patients underwent bone marrow ablation with the drug A (n=25) and drug B (n=34). The out come measure was the cerebellar toxicity to these drugs which at the end of follow up was (drug A=11 and drug B=3)
  - a) Complete the 2x2 table using this data.
  - b) What is the incidence of toxicity in the exposed group?
  - c) What is the incidence of toxicity in the unexposed group?
  - d) What is the risk ratio?
  - f) What is your interpretation of the RR?

## M.D. DEGREE EXAMINATION –OCTOBER, 2014 PSYCHIATRY

Paper-II: Organic Psychiatry and Psychosomatic Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Clinical features, Etiopathology and Management of Fronto-temporal dementia
- 12) Psychiatric manifestations of Chronic Temporal lobe epilepsy
- 13) Clinical features, Aetiopathology and management of Motor Neuron Disease
- 14) Psychological correlates of Irritable bowel syndrome
- 15) Dermatological disorders in Psychiatric patients
- 16) Mirror neurons and their significance in understanding Brainbehaviour interaction.
- 17) Physical and psychiatric manifestations of SLE and its management
- 18) Clinical features, types, differential diagnosis and management of Delirium.
- 19) Pharmacology, adverse effects and uses of Memantine
- 20) Management of Status epilepticus

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 BIOCHEMISTRY

Paper-II: Chemistry and Metabolism.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) What is Transamination? Explain by giving two examples
- 52) Explain the Digestion and Absorption of carbohydrates
- 53) Enumerate two hormones which affect Calcium and phosphorus metabolism. Write how these hormones regulate them in the body.
- 54) Explain antioxidant defence mechanism in biological system
- 55) Describe the formation and excretion of Bilirubin. Explain the significance of serum bilirubin and urobilinogen in the diagnosis of various types of jaundice.
- 56) Starvation induced Ketonaemia
- 57) Describe the Salvage pathways for Purine and Pyrimidine synthesis.
- 58) Role of Kidney in blood p<sup>H</sup> regulation
- 59) Define Enzymes. Classify enzymes according to IUB system with one example each. Write three enzymes commonly estimated after myocardial infarction
- 60) Functional classification of Proteins. Enumerate Essential amino acids

#### PHARMACOLOGY

Paper-II: Pharmacology of Drugs affecting CNS, ANS, CVS and Renal functions.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Endothelin receptor antagonists
- 2. Central a2 agonists
- 3. Non epileptic use of Antiepileptic drugs
- 4. Atypical Antipsychotics
- 5. Pharmacology of drugs acting on proximal renal tubules
- 6. Drugs used in Hypertensive emergencies
- 7. Fatty acid oxidation inhibitors
- 8. Therapeutic uses of Magnesium
- 9. Enzyme inhibitors in the treatment of Parkinson's disease
- 10. Opiod antagonists

### FORENSIC MEDICINE

Paper-II: Pathology and Microbiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) Describe Gas liquid chromatography
- 52) Discuss post mortem chemistry of Cerebrospinal fluid
- 53) Nosocomial infection
- 54) Discuss the histopathological diagnosis of death due to Tuberculosis.
- 55) Write briefly about Amniotic fluid embolism
- 56) Describe the pathophysiology of Shock.
- 57) Botulism
- 58) Discuss autopsy in HIV positive body
- 59) How will you investigate a case of death due to food poisoning?
- 60) Air embolism.

### SYSTEMIC PHYSIOLOGY

Paper-II: Blood, Digestion, excretion, endocrine including reproductive system

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Colony stimulating factors
- 12) Mechanism of hemostasis
- 13) Esophageal peristalsis
- 14) Migrating motor complexes
- 15) Reflex control of micturition
- 16) Mode of action of diuretics
- 17) Regulation of secretion of hormone
- 18) General adaptation syndrome
- 19) Control of onset puberty
- 20) Male hypogonadism

## M.S. DEGREE EXAMINATION – OCTOBER, 2014 GENERAL SURGERY

Paper-II: General Surgery including Trauma and Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Early gastric carcinoma
- 12) Discuss advanced carcinoma breast
- 13) Classification of salivary gland tumors and discuss pleomorphic adenoma
- 14) Portal hypertension
- 15) Malignant melanoma
- 16) Ulcerative colitis
- 17) Describe the associated internal injuries in pelvic fractures and outline the management of pathological fracture
- 18) Discuss peripheral nerve injuries
- 19) Liver trauma and management
- 20) Neck injuries and management

### M.S. DEGREE EXAMINATION – OCTOBER, 2014 ORTHOPAEDICS

Paper-II: Traumatology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) Classify ankle injuries and outline management
- 52) Chance fracture
- 53) Intercondylar fractures of femur
- 54) Management of pathological fractures of long bones
- 55) Claw hand deformity
- 56) Classify Talus injuries, outline management
- 57) Crush syndrome
- 58) Malunited Supracondylar fracture humerus
- 59) Management of Non union Neck of femur in an young adult
- 60) Burst fracture of the Dorso lumbar spine

### M.S. DEGREE EXAMINATION – OCTOBER, 2014 OPHTHALMOLOGY

Paper-II: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) Floopy eye syndrome.
- 52) Molai imbalance nystagmus.
- 53) Uveal effusion syndrome
- 54) Non-Ophthalmos
- 55) Importance of axoplasmic flow in glaucoma
- 56) Classify Diplopia and note on compensatory mechanism for diplopia
- 57) Management of Non-infectious Viral keratitis
- 58) Malignant glaucoma
- 59) Management of Dropped nucleus
- 60) Management of Amblyopia in children

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### M.S. DEGREE EXAMINATION – OCTOBER, 2014 OTORHINOLARYNGOLOGY

Paper-II: Diseases of Ear, Nose and Throat, Surgical pathology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Rhinosporidiosis and its treatment
- 12) Thyroglossal cyst and explain removal by surgery.
- 13) Tuberculous otitis media.
- 14) Treacher-Collin's syndrome.
- 15) Tympanosclerosis
- 16) Write in detail the types and spread of carcinoma larynx
- 17) Cardiac achalasia.
- 18) Tracheo oesophageal fistula
- 19) Rhinolith
- 20) Discuss the pathogenesis and complications of sinusitis

# M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANATOMY

Paper-II: Gross Anatomy.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Boundaries and contents of the cubital fossa
- 12) Nerve and blood supply of the urinary bladder
- 13) Rectum and anal canal
- 14) Venous drainage of the heart
- 15) Parotid gland
- 16) Diagram to show superficial relations of Hyoglossus
- 17) Ankle joint
- 18) Ciliary ganglion
- 19) Lymphatic drainage of lower limb
- 20) Pleura

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### D.V.L.

### Paper-II

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary
Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 51) Pediculosis
- 52) Types and etiopathogenesis of Lichen planus.
- 53) Xeroderma Pigmentosum
- 54) Endogenous eczemas
- 55) Langerhans cell histiocytosis.
- 56) Biological therapy in psoriasis
- 57) Malignant melanoma
- 58) Sunscreens
- 59) Erythroplasia of Queyrat
- 60) Dermatofibroma

### HOSPITAL ADMINISTRATION

Paper-II – Health Administration and Medical Care (includes Epidemiology, Biostatistics & Research Methodology)

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Role of hospitals in providing primary health care
- 12) Quality Adjusted Life Years
- 13) National AIDS control programme, its achievements and constraints
- 14) Case control vs Cohort studies
- 15) Measurements of central tendency
- 16) Sampling methods and errors in sampling
- 17) Total quality management in hospitals
- 18) Basic concepts of health economics
- 19) Investigation and control of epidemics
- 20) Life style diseases and their prevention

#### **GENERAL MEDICINE**

Paper-III – Principles and practice of Medicine including Therapeutics

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Clinical feature, diagnosis and treatment of large vessel vasculitis
- 12. Aetiology, clinical features and management of pyogenic meningitis
- 13. Diagnosis and treatment of pulmonary embolism
- 14. Vaccination in transplant recipient
- 15. Current concepts of treatment of Parkinson's disease
- 16. Osteoporosis management
- 17. Causes and management of erectile impotence
- 18. Allergic Broncho Pulmonary Aspergillosis
- 19. Advances in the management of heart failure
- 20. Leukotriene receptor antagonist

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 OBSTETRICS & GYNAECOLOGY

### Paper-III – Gynaecology including Family Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 97. Discuss the controversies in the management of endometrial cancer
- 98. Describe the investigations and management of male infertility.
- 99. Discuss the management of stress urinary incontinence
- 100. Discuss the current status of injectable contraceptives
- 101. Write short notes on:

5+5

- a) Advantages and disadvantages of intrauterine contraceptive devices
- b) Fine needle aspiration cytology
- 102. Discuss the role of conservative surgery in gynecology
- 7. Describe the medical management of dysfunctional uterine bleeding
- 8. What are the recent advances in the management of uterine fibroids?
- 9. Describe the causes of vault prolapse and its management
- 10. Write short notes on:

5+5

- a) Krukenberg's tumour
- b) Bacterial vaginosis

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 PAEDIATRICS

Paper-III – Nutrition, Infant feeding, Immunology and Communicable diseases.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61. Nutritional requirements of infants aged 1-12 months
- 62. Discuss the immunological basis for pediatric vaccination. Enumerate newer vaccines and their schedule
- 63. Describe indications and choice of drugs for prophylaxis to prevent first episode of opportunistic infections among HIV infected children
- 64. Discuss the etiology, clinical features, complications and management of epidemic parotitis
- 65. Describe the clinical features, complications and management of Typhoid fever.
- 66. How would you treat and prevent Hypoglycemia in Severe acute malnutrition?
- 67. Describe the role of zinc in health and disease
- 68. Describe the pathogenesis and management of 'Not enough milk' in breast feeding.
- 69. Describe the clinical features, diagnosis and treatment of Allergic rhinitis
- 70. Describe how you would evaluate severity of Asthma exacerbation.

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANAESTHESIOLOGY

Paper-III: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 105. What are the complications which can occur during Laparoscopic surgery? Discuss the method of management.
- 106. Discuss the management of a patient with recent myocardial infarction coming for emergency strangulated inguinal hernia surgery.
- 107. What are the anaesthetic considerations for a patient suffering from End stage renal failure?
- 108. How will you manage a five year old child with a Foreign body in the bronchus admitted for endoscopic removal?
- 109. What precautions are to be take when administering anaesthesia to a patient with Human immunodeficiency virus (HIV) infection and AIDS
- 110. Discuss the various anaesthesia techniques for Cataract surgery. Mention the complications and treatment
- 111. Discuss the anaesthesia problems for a patient in Dental chair
- 112. A ten year old boy is suffering from Fallot Tetrology has brain abscess. Out line the perioperative management.

- 113. What are the complications of Trans urethral resection of prostate? Discuss the management.
- Describe the various anaesthetic techniques for carotid endarterectomy surgery.

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 PATHOLOGY

Paper-III : Hematology, Clinical Pathology, Cytology and Chemical Pathology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

105. diagr	nosis of diseases associated with	Pathophysiology and laboratory factor VIII deficiency
106.		Role of FNAC in salivary gland
lesio	ns	
107.		Non-enzymatic glycosylation
108.		Myelophthisic anemias
109.		Describe genetic alterations in
Leuk	emias	
110.		Etiopathology and laboratory
diagr	nosis in Acute renal failure	
111.		Plasma cell dyscrasias
112.		Role of Enzymes in diagnosis and
prognosis		
113.		Thyroid function tests.
114.	Etiopathology and laboratory diagnosis of Chronic liver disease	

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 RADIO DIAGNOSIS

Paper-III: Principles and Practice of Radio Diagnosis

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Classify congenital heart disease. Discuss the radiological features in conditions with left right shunt.
- 12) Role of doppler in male infertility
- 13) Transrectal ultrasound of prostate
- 14) Write short notes on:
  - a) Role of MRI in shoulder injuries
  - b) Metabolic bone diseases
  - c) Orbital tumors
  - d) Interventions in emphysematous pyelonephritis
  - e) Endoscopic ultrasound
- 15) Radiological features of ovarian malignancies
- 16) Cystic tumors of pancreas
- 17) Write short notes on:
  - a) PCOS
  - b) Types of calcification in mammography
  - c) DISH
  - d) HRCT manifestations of sarcoidosis
  - e) Functional tumours of pancreas
- 18) Imaging of renal tumors
- 19) Imaging of acute appendicitis
- 20) Uterine artery embolization

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 PULMONARY MEDICINE

Paper-III: Non-Tuberculosis Chest Diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) Preoperative pulmonary evaluation
- 62) Obesity and its Pulmonary manifestations
- 63) Solitary pulmonary nodule (SPN): Definition and differentiation between benign and malignant SPN
- 64) Classification, symptoms and management of Pulmonary hypertension
- 65) Sildenafil citrate in Respiratory pharmacotherapy
- 66) Sudden Asphyxiating asthma
- 67) Bronchiolitis obliterans with organizing pneumonia (BOOP)
- 68) Thoracic sarcoidosis
- 69) Congenital bronchiectasis
- 70) Long term oxygen therapy

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 MICROBIOLOGY

Paper-III: Virology, Mycology and Parasitology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) Discuss etiology, immunopathogenesis and laboratory diagnosis of swine origin influenza A virus
- 62) Enumerate Neurotropic Arboviruses in India. Outline their laboratory detection methods
- 63) Describe Tissue culture techniques in Viral isolation and Viral diagnosis
- 64) Briefly describe Cultivation techniques of E. histolytica and Giardia. Discuss immune response to E. Histolytica infection
- 65) Classify Cestodes. Discuss Pathophysiology of Neurocysticercosis with its laboratory diagnostic methods
- 66) Discuss mechanism of action of various Antifungal agents. Outline in-vitro Antifungal susceptibility testing methods
- 67) Enumerate fungi causing Subcutaneous Mycosis. Briefly outline laboratory diagnosis
- 68) Discuss immunopathogenesis of HIV. Write a note on obstacles faced in HIV vaccine development
- 69) Discuss Filariasis in India with Laboratory diagnostic methods
- 70) Discuss recent advances in Rabies vaccine

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-III: Maternal and Child health, Family Planning,

Environmental Hygiene and Occupational health

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- List out the causes of Neonatal mortality in India. Describe in detail the predisposing factors and preventive measures aimed to reduce NMR.
- 12) Discuss the main Health problems encountered in the Child population
- 13) Role of Public Private Partnership in Family Welfare Programme
- 14) Discuss the issues and challenges of Food safety in India
- 15) Describe the role of UNICEF in India
- 16) Compare the advantages and disadvantages of Rapid & Slow sand filters
- 17) List out the chemicals/agents used in Disinfection of water supplies. Elaborate on the principles of Chlorination.
- 18) Write a note on Occupational cancers.
- 19) Write a note on Oxidation pond.
- 20) e-Waste is becoming a major problem in India. Write about its impact on the health of the community

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 PSYCHIATRY

Paper-III: General Psychiatry

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Cognitive theory of and Cognitive behaviour therapy for OCD
- 12) Clinical features, differential diagnosis and management of hypochondriasis.
- 13) Clinical features, comorbidities, diagnostic features and management of borderline personality disorder.
- 14) Theories of the social origins of Depression
- 15) Neurobiology of Schizophrenia
- 16) Psychopathology of Delusions
- 17) Classification, description and management of female sexual dysfunctions.
- 18) Neuro psychiatric complications of Alcohol dependence and their management
- 19) Concept of dual diagnosis in Psychiatry and its pros and cons.
- 20) Principles of Rehabilitation in Psychiatry

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 BIOCHEMISTRY

Paper-III: Hormones and Nutrition

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) Write about the absorption, transport and storage of iron in the body
- 62) What are Lipotropic factors? Enumerate three lipotropic factors
- 63) Describe the mechanism of action of insulin on target cells
- 64) Interrelation between Folic acid and Vitamin B<sub>12</sub>
- 65) c-AMP as a Second messenger for hormone action
- 66) Name any four B-complex vitamins with their active forms
- 67) Outline the role of Vitamin A in the Visual cycle.
- 68) Why Vitamin D is called Antirachitic factor?
- 69) Role of Copper in health and disease
- 70) Hormonal regulation of serum Calcium levels.

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#### M.S. DEGREE EXAMINATION – OCTOBER, 2014 PHARMACOLOGY

Paper-III: Drugs affecting Hormones, Chemotherapy and blood.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Thrombopoietic growth factors
- 12) Spiramycin
- 13) Androgen receptor antagonists
- 14) Bisphosphonates
- 15) Limitations of various viral vaccines.
- 16) Selective estrogen receptor modulators (SERM)
- 17) Aromatase inhibitors
- 18) Therapeutic options available for the management of Chloroquine resistant plasmodium falciparum malaria
- 19) Echinocandins
- 20) Microtubular disruptors in cancer chemotherapy

# M.D. DEGREE EXAMINATION – OCTOBER, 2014 FORENSIC MEDICINE

#### Paper-III

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) Write in brief about Negative autopsy
- 62) How will you proceed for examination of Fragmentary remains?
- 63) Describe briefly Brain stem death
- 64) Describe in detail Coup and contrecoup injuries
- 65) Differentiate between ante mortem and post mortem injuries
- 66) Discuss IPC section relevant to injuries
- 67) Discuss the estimation of age of injuries and time since death by enzyme biochemistry
- 68) Discuss Seat belt syndrome
- 69) Entomology of Cadaver
- 70) Surrogate motherhood and medicolegal problems associated with the procedure

### M.D. DEGREE EXAMINATION – OCTOBER, 2014 SYSTEMIC PHYSIOLOGY

Paper-III: CNS, CVS, RS and Special Senses

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

Draw diagrams wherever necessary All questions carry equal marks

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Events during ventricular systole
- 12) Application of law of Laplace in cardio-respiratory system
- 13) Critical survival altitude
- 14) Physiology of pulmonary oedema
- 15) Electrical and ionic events in receptors
- 16) Organization and function of Autonomic nervous system
- 17) Connections and functions of Prefrontal lobes
- 18) Depth of focus
- 19) Factors affecting Taste sensation
- 20) Theories of Pitch discrimination

## M.S. DEGREE EXAMINATION – OCTOBER, 2014 GENERAL SURGERY

Paper-III: Systemic Surgery including Surgical Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks
Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Discuss Obstructive jaundice
- 12) Write briefly precancerous conditions of tongue and management of carcinoma tongue
- 13) Etiology, clinical features and management of Hyperthyroidism
- 14) Discuss mediastinal tumors
- 15) Describe clinical features, investigations and management of putty kidney
- 16) Regional ileitis
- 17) Enterocutaneous fistula.
- 18) Choledochal cyst.
- 19) Testicular tumor
- 20) Discuss rupture of spleen

## M.S. DEGREE EXAMINATION – OCTOBER, 2014 ORTHOPAEDICS

Paper-III: Elective Orthopaedics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe degenerative Spondylolisthesis of the lower lumbar spine outline management
- 12) Perthes' disease of hip clinical presentation, radiological features and management
- 13) Osteo sarcoma
- 14) Hallux valgus deformity
- 15) Surface replacement arthroplasty
- 16) Tuberculosis knee joint
- 17) Tom smith arthritis of hip
- 18) Neuropathic joint
- 19) Blount's disease
- 20) Volkman's ischemic contracture

## M.S. DEGREE EXAMINATION – OCTOBER, 2014 OPHTHALMOLOGY

Paper-III: Principles of Ophthalmic Medicine and Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) Central serous retinopathy
- 62) NPCB
- 63) Defective elevation of one eye
- 64) Fundus changes in Eclampsia and their management.
- 65) Ocular features and differential diagnosis of Migraine
- 66) Pseudopapilledema
- 67) Management of contracted socket
- 68) White dot syndrome
- 69) Orbital decompression surgery
- 70) Corneal blindness and eye bank in India

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#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 OTORHINOLARYNGOLOGY

Paper-III: Principles and practice of Ear, Nose and Throat diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Etiopathology of unilateral proptosis
- 12) Prosthesis in ossiculoplasty
- 13) Laser in laryngeal surgery.
- 14) Evaluation of snoring and sleep apnoea
- 15) Allografts in tympanoplasty
- 16) Recent trends in management of otosclerosis
- 17) Investigations and management of CSF rhinorrhea
- 18) Management of rhinophyma.
- 19) Brachytherapy
- 20) Implantable hearing devices.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANATOMY

Paper-III: Histology, Genetics and Museum Techniques

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Microanatomy of the spleen
- 22) Gene therapy
- 23) Clearing agents
- 24) Embalming
- 25) Intercellular junctions.
- 26) Importance of teaching sectional anatomy
- 27) Stem cells
- 28) Microstructure of the respiratory tree
- 29) Golgi complex
- 30) Microanatomy of the male reproductive tract

## M.D. DEGREE EXAMINATION – OCTOBER, 2014 D.V.L.

Paper-III: Sexually transmitted diseases and Leprosy

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) General paralysis of insane
- 62) Stigmata of congenital syphilis
- 63) Complications of gonorrhoeae
- 64) Chancroid.
- 65) Syndromic management of sexually transmitted infections
- 66) Quite nerve paralysis in leprosy
- 67) Ocular complications in leprosy
- 68) Role of vaccines in prevention and treatment of leprosy
- 69) National leprosy eradication programme.
- 70) Paralytic deformities of leprosy.

# M.D. DEGREE EXAMINATION – OCTOBER, 2014 HOSPITAL ADMINISTRATION

#### Paper-III – Health Administration and Planning

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Role, responsibilities and challenges of hospital administrators.
- 12) Public relations in hospitals
- 13) Disciplinary procedures as applicable to government hospital employees
- 14) Fire safety-principles and practices in hospitals
- 15) Hospital planning team
- 16) PNDT ACT and its implications for hospital administrators
- 17) Principles of Disaster Management Plan for hospital located in seismic zone IV locality
- 18) Hospital Bed Utilization statistics and their significance
- 19) Architect's Brief
- 20) Macro planning of hospitals.

#### M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### GENERAL MEDICINE Paper-IV – Tropical Medicine

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11. Describe the pattern of infection in tropical countries
- 12. Endemic fluorosis
- 13. Hypokalemia Causes and management
- 14. Somatoform disorder and its management
- 15. Therapeutic angiogenesis
- 16. Tropical pancreatitis
- 17. Hypopituitarism Diagnosis and management
- 18. Sickle cell crisis
- 19. Renal osteodystrophy
- 20. Nano technology in medicine

#### M.S. DEGREE EXAMINATION - OCTOBER, 2014

# OBSTETRICS & GYNAECOLOGY Paper-IV – Surgery & Medicine in relation to Obstetrics and Gynaecology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 65. What are the causes of Anaemia in pregnancy? Discuss the prevention of anaemia in pregnancy.
- 66. Write short notes on:

5+5

- a) Bronchial asthma in pregnancy
- b) Appendicitis in pregnancy
- 67. Discuss the use of Lasers in obstetrics and gynecology
- 68. Discuss the current controversies in hormone replacement therapy
- 69. Write short notes on:

5+5

- a) Insulin sensitizers in polycystic ovary syndrome
- b) Labetalol
- 70. What are the causes of venous thrombosis? How will you treat?
- 71. Discuss the management of Rhesus isoimmunization
- 72. What is the aetiology and management of Hyperemesis gravidarum?
- 73. Discuss the role of Micronutrients in pregnancy
- 74. Describe the management of Septic shock

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#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 PAEDIATRICS

#### Paper-IV – Diseases of infancy and childhood

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71. Describe the clinical features and complications of Tetralogy of Fallot
- 72. Describe the causes and management of Stroke in childhood
- 73. Describe the management approach to Stridor in children.
- 74. Describe the management of Acute Lymphoblastic Leukemia
- 75. Describe the clinical features and management of Gastroesophageal reflux
- 76. Describe the treatment of Juvenile idiopathic arthritis
- 77. Write the complications of Hepatitis and Management of Fulminant Hepatic Failure
- 78. Describe the classification and treatment of Haemophilia
- 79. Describe the clinical features and management of sleep-disordered breathing
- 80. Describe the detection and assessment of physiological instability in Pediatric emergency

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANAESTHESIOLOGY

Paper-IV: Principles and Practice of Anaesthesiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 67. What are the common Neonatal emergencies? Explain the principles of perioperative fluid therapy in neonates
- 68. What are the intra operative and post operative complications of Total hip replacement in geriatric patient?
- 69. Describe the Cervical plexus block. Mention the various types of operations that can be performed under this anaesthesia.
- 70. Classify Tracheo-oesophageal fistula (TOF). Discuss the anaesthetic management of a one day old baby weighing 2.5 kg having TOF.
- 71. Discuss the Anaesthetic management of an inadequately managed diabetic patient with Keto acidosis posted for Below knee amputation.
- 72. Discuss the clinical significance of anaesthesia for a pregnant woman coming for Non-obstetric surgery.
- 73. Describe the anaesthetic problems and management of a three month old child with Hydrocephalus for shunt surgery.
- 74. Describe the preoperative preparation and anaesthetic management of patient coming for removal of pheochromocytoma
- 75. Discuss the role of Anaesthetists in chronic pain relief and palliative care
- 76. What are the causes of Intraoperative bronchospasm? Discuss the management

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# M.D. DEGREE EXAMINATION – OCTOBER, 2014 PATHOLOGY

Paper-IV: Recent advances in pathology related to clinical medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 64. Describe recent advances in Amyloidosis.
- 65. Describe Cystic lesions of jaw
- 66. Recent trends in various types of Colitis
- 67. Human papilloma virus association with Female genital tract
- 68. Pathology, diagnosis and therapeutic implications of Tertiary hyperparathyroidism.
- 69. Childhood Neoplasms metastasizing to Bone-marrow
- 70. Describe Myopathies associated with inborn errors of metabolism
- 71. Describes Pathophysiology and complications of Paget's disease of bone
- 72. Pinealomas
- 10. Pathology of Campylobacter infections in humans.

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#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 RADIO DIAGNOSIS

# Paper-IV: Radiodiagnosis including Nuclear Medicine and other diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks
Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 59. Discuss the various radiological and imaging features of lesions in the posterior cranial fossa
- 60. Spinal dysraphism
- 61. Constructive Pericarditis
- 62. Wrote short notes on:
  - a) BOLD technique
  - b) Anencephaly
  - c) Virtual bronchoscopy
  - d) Fistula-in-ano
- 63. Imaging approach to hematuria
- 64. Role of ultrasound in I trimester bleeding
- 65. Classify uterine anomalies and role of imaging
- 66. Write short notes on:
  - a) Anorectal malformation
  - b) MR contrast agents
  - c) Ovarian torsion
  - d) MR angiography
- 67. CP angle tumors
- 68. Mention role of imaging in Leukodystrophies

- - -

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 PULMONARY MEDICINE

Paper-IV: Epidemiology of Tuberculosis and Prevention,

Recent advances in Tuberculosis and Chest diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71) National ambient air quality standards
- 72) Neurally adjusted ventilator assist (NAVA)
- 73) Indacaterol
- 74) Revised (ATS/ERS) classification of Interstitial lung disease
- 75) Medical Thoracoscopy
- 76) Rapid on-site cytopathology evaluation
- 77) Bedaquiline
- 78) Clinical utility of exhaled nitric oxide (Fe<sub>NO</sub>) measurements
- 79) Assessing quality of life in COPD
- 80) Clinical Pulmonary infection score

#### M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### **MICROBIOLOGY**

Paper-IV: Applied Microbiology and Recent Advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71) Write an essay on MDR superbugs
- 72) Investigation of a case of Ventilator associated pneumonia (VAP) in ICU.
- 73) Give an account of : Surveillance of Nosocomial pathogens and formulation of antibiotic policy
- 74) Role of MALDI-TOF in diagnostic Microbiology
- 75) Automated drug susceptibility methods in clinical Microbiology
- 76) Give an account of Line probe methods and its role in Diagnostic Microbiology
- 77) Role of Experimental animals with special reference to mice in diagnostic Microbiology
- 78) Recombinant DNA technology and its use in Molecular Microbiology
- Give an account of recent Rapid diagnostic methods in Arboviral infection detection
- 80) Discuss the Recent Advances in the Development of Malaria Vaccines

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 SOCIAL & PREVENTIVE MEDICINE

Paper-IV: Health Administration and Related Subjects

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Describe in detail the Planning cycle in context of a new health program you have to design for a district on eradication of Measles among under-fives in that district.
- 12) Discuss the role of Non Governmental Organisations (NGOs) in health. Explain the concept of Public-Private partnership and outline the initiatives in the Indian context.
- 13) Enumerate pros & cons of organizing and attending conferences and seminars
- 14) Critical Path Method (CPM) with examples
- 15) You are the District Health Officer of a mountainous Seacoast cyclone prone area. Formulate a plan of action to mitigate the suffering of the population which was affected by a severe cyclone.
- 16) Write a note on Cost Benefit Analysis
- 17) What are the objectives of the National Programme for the Control of Blindness? Discuss its achievements so far.
- 18) Discuss the terms Equitable distribution and Community participation.
- 19) Discuss the Socio-economic status scale of Kuppuswamy
- Health and disease are not equally distributed among people of different social classes-comment.

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014

#### **PSYCHIATRY**

Paper-IV: Psychiatric Specialties

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Complementary and Alternative medicines in psychiatry.
- 12) Clinical features, etiopathology and management of Pervasive developmental disorders.
- 13) Clinical features, risk factors and management of post partum depression
- 14) District mental health programme in India.
- 15) Rights of the mentally ill
- 16) Features of the Persons with Disabilities Act
- 17) Pharmacokinetic and pharmacodynamic changes that occur in the elderly
- 18) Pharmacology, adverse effects and uses of Paliperidone
- 19) Nonspecific beneficial effects of Psychotherapy
- 20) Child abuse and neglect

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 BIOCHEMISTRY

Paper-IV: Clinical Biochemistry

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71) Diagnostic importance of Isoenzymes of CK and ALP
- 72) Serum sample of an 18 year old boy was analyzed and the report is as under

Bilirubin: 20 mg/dl, AST:250 U/L, ALT:280 U/L, ALP:180 U/L

- a) Interpret the enzyme levels and identify the underlying defect
- b) What is the significance of AST:ALT ratio?
- 73) Hypoglycaemia and Alcohol intoxication
- 74) Clinical significance of Proteinuria
- 75) Interpretation of CSF analysis
- 76) Biochemical basis of Fatty liver.
- 77) Endogenous Creatinine clearance test
- 78) Describe the role of Laboratory in the diagnosis and management of Inborn errors of Lipoprotein metabolism
- 79) Describe lysosomal storage disorders
- 80) Nanotechnology in diagnostics

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#### M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### **PHARMACOLOGY**

Paper-IV: Clinical Pharmacology & Therapeutics

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Drug therapy of migraine
- 12) Management of acute severe bronchial asthma
- 13) Current status of Fluoroquinolones as Antibacterial agents
- 14) Treatment of H.pylori infection
- 15) Drugs used in treatment of Inflammatory bowel disease
- 16) Prostaglandin analogues used in obstetrics
- 17) Management of Myxedema coma
- 18) Merits and demerits of Hormonal contraceptive preparations
- 19) Drug therapy of Obesity.
- 20) Gene therapy for inherited conditions

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 FORENSIC MEDICINE

Paper-IV: Medical Jurisprudence, Forensic Psychiatry and Medico legal Toxicology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71) Describe ethics in relation to biomedical human research and experimentation
- 72) Discuss formation and functions of State Medical Council
- 73) Classify Barbiturates. State the signs, symptoms and management of barbiturates poisoning
- 74) Define the doctrine of "Res ipsa loquitur". State conditions satisfying this doctrine
- 75) Describe Consumer Protection Act. How far it is applicable in medical profession?
- 76) Discuss opium poison and its medico legal importance
- 77) Describe role of Forensic expert in clinical toxicology
- 78) Discuss Contributory negligence
- 79) Doctrine of diminished responsibility
- 80) Define Delusion, its types and Medico legal significance

### M.D. DEGREE EXAMINATION – OCTOBER, 2014

#### SYSTEMIC PHYSIOLOGY

Paper-IV: Applied Physiology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Alteration in the function of G protein receptors
- 12) Metabolic myopathy
- 13) Methemoglobinemia
- 14) Steatorrhea.
- 15) Metabolic acidosis and alkalosis
- 16) Major causes of Dwarfism
- 17) Tubal pregnancy
- 18) Second degree heart block
- 19) Alpha and Gamma rigidity.
- 20) Strabismus

#### M.S. DEGREE EXAMINATION – OCTOBER, 2014 GENERAL SURGERY

Paper-IV : General Surgery, Operative Surgery including recent advances

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Etiology, investigations and management of Hyperparathyroidism
- 12) Common bile duct stones
- 13) Chronic limb ischemia
- 14) Breast surgery after Neo adjuvant therapy
- 15) Discuss surgeries for Rectal prolapse
- 16) Recent trends in Bariatric Surgery
- 17) Define SILS/NOTES. What are the current applications of these procedures in General Surgery and highlight the technical challenges faced when compared to Conventional Laparoscopic Surgery(3+4+3)
- 18) Etiology and management of Upper G.I bleed
- 19) Discuss Differential diagnosis of carcinoma thyroid
- 20) Discuss various surgeries for Chronic duodenal ulcer.

#### M.S. DEGREE EXAMINATION – OCTOBER, 2014 ORTHOPAEDICS

Paper-IV: Recent advances in Operative Surgery

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Locked compression plate
- 12) Minimally invasive spinal surgery.
- 13) Bone morphogenic protein.
- 14) Recent advances in Lumbar Discectomy
- 15) Periprosthetic fractures of the femur
- 16) Needle biopsies in Orthopedics
- 17) Laminar air flow
- 18) Thoracoscopic spine surgery
- 19) MRI in Orthopaedics
- 20) Chemonucleolysis

#### M.S. DEGREE EXAMINATION – OCTOBER, 2014 OPHTHALMOLOGY

Paper-IV: Recent advances in Ophthalmology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71) Newer perimetric test.
- 72) CT scan in neuro ophthalmic diagnosis
- 73) Amniotic membrane graft in recurrent Pterygium
- 74) INTAC's
- 75) Ocular aesthetics
- 76) Photodynamic therapy in age related Macular degeneration
- 77) Phakic IOL.
- 78) Visual rehabilitation in handicapped children
- 79) Descemet's stripping endothelium keratoplasty
- 80) What is Bionic eye and how does bionic eye allow the blind to see?

#### 183-NR M.S. DEGREE EXAMINATION – OCTOBER, 2014 OTORHINOLARYNGOLOGY

Paper-IV: Operative Surgery and allied clinical subjects connected to Ear, Nose and Throat speciality

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Stapedectomy
- 12) Augmentation rhinoplasty
- 13) Endolymphatic Sac Surgery
- 14) Laryngotracheal stenosis and its management
- 15) Discuss the etiopathology, clinical features and management of Otogenic Brain Abscess
- 16) Surgical approaches for cerebello-pontine angle tumour
- 17) Velopharyngeal incompetence and its treatment
- 18) Translabyrinthine approach for posterior fossa
- 19) Surgical management of juvenile papilloma of larynx
- 20) Mandibular reconstruction using osteo-myocutaneous flap

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#### M.D. DEGREE EXAMINATION – OCTOBER, 2014 ANATOMY

Paper-IV: Neuroanatomy and Embryology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Internal capsule
- 32) Draw a labelled diagram to show the internal structure of the medulla at the sensory decussation.
- 33) Red nucleus of midbrain
- 34) Subarachnoid cisterns
- 35) Korsakoff's syndrome
- 36) Placental barrier
- 37) Development and anomalies of urinary bladder
- 38) Chorion
- 39) Rotation of midgut
- 40) Twinning

#### M.D. DEGREE EXAMINATION - OCTOBER, 2014

#### D.V.L.

Paper-IV: Dermatology in relation to other systemic diseases

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 71) Cutaneous manifestations of Diabetes Mellitus
- 72) Scurvy
- 73) Xanthomas
- 74) Pretibial Myxedema
- 75) Variegate porphyria
- 76) POEMS syndrome
- 77) Acanthosis Nigricans.
- 78) Cutaneous signs of chronic renal failure
- 79) Dermatitis Artefacta
- 80) Calcinosis Cutis

#### M.D. DEGREE EXAMINATION – OCTOBER, 2014

#### HOSPITAL ADMINISTRATION

Paper-IV – Administration of Clinical and Non-Clinical Services and Administrative procedures

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks Draw diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) Planning Premises for Ambulatory care of a 500 bedded District Hospital.
- 12) HVAC systems for Operation Theatres
- 13) Radiation Safety
- 14) Quality Assurance of Laboratory Services
- 15) Physical Facility and Equipment Planning for Accident and Emergency services of a proposed 1000 bedded Tertiary Care Hospital.
- 16) Importance of Medical Records.
- 17) Customer Relationship Management
- 18) Riggs Pattern wards.
- 19) Quality Assurance Programme of CSSD
- 20) Salient Features of Dialysis Unit.

- -

# COMPILED BY LAKSHMANA REDDY DWARAMPUDI, LIBRARIAN, RANGARAYA MEDICALCOLLEGE, KAKINADA

100-NR

#### M.D. DEGREE EXAMINATION – APRIL, 2015

#### GENERAL MEDICINE Paper-I – Basic Medical Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Renin Angiotensin Aldosterone Axis and Secondary Aldosteronism.
- 2) Role of creatinine phosphokinase in clinical diagnosis.
- 3) Maintenance of water balance and SIADH.
- 4) Pathway of light reflex and various pupillary abnormalities.
- 5) Metabolic Acidosis.
- 6) Body mass index and its role in various disorders.
- 7) Oncogene.
- 8) Fluorescent In-Situ Hybridization (FISH) technique in the diagnosis.
- 9) CD<sub>4</sub> count.
- 10) Maintenance of Iron balance and Iron overload states.

#### M.S. DEGREE EXAMINATION – APRIL, 2015

#### OBSTETRICS & GYNAECOLOGY Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- Describe the structure of placenta and name the hormones produced by it.
- 2) Describe the anatomy of Pelvic floor and its clinical importance.
- 3) Describe the Physiology of Lactation. Name the Galactogogues.
- 4) Describe the formation and circulation of Amniotic fluid. Enumerate the problems of severe Oligohydramnios.
- 5) Discuss the use of Chemotherapeutic drugs in Cancer Cervix.
- 6) Discuss the drugs used in the management of Menorrhagia.
- 7) Discuss the role of infections as a cause of Abortion and their diagnosis.
- 8) Discuss the role of Biochemical investigations in the diagnosis of Foetal abnormalities.
- 9) Discuss the Pathology of Genital Tuberculosis.
- 10) Discuss the pathology of cervical intraepithelial neoplasia (CIN).

#### M.D. DEGREE EXAMINATION – APRIL, 2015 PAEDIATRICS

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions.

All questions carry equal marks.

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81. Describe the pathophysiology of Perinatal asphyxia.
- 82. Describe the Physiology of sex development.
- 83. Define Obesity in children and describe the mechanism of regulation of Body weight.
- 84. Describe the use of drugs in Attention Deficit Hyperactivity Disorder.
- 85. Describe the causative factors and mechanisms of development of Resistance to Antibiotics in Bacteria.
- 86. Describe monitoring and management of Adverse drug reactions of Anti Tuberculosis drugs.
- 87. Discuss the factors of growth in children and enumerate causes of short stature in children.
- 88. Describe the diagnosis and management of hypernatremia in an infant.
- 89. Describe the Electro cardiographic changes associated with Disturbances of Potassium.
- 90. Describe the Haemodynamic classification of Congenital Cyanotic Heart diseases.

# M.D. DEGREE EXAMINATION – APRIL, 2015 ANAESTHESIOLOGY

Paper-I: Basic Sciences in relation to Anaesthesiology

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21. Describe the portal circulation. Mention the liver function tests and its implication to anaesthesia.
- 22. Draw the oxygen dissociation curve. Discuss the implications in anaesthesia.
- 23. Write a note on body temperature regulation.
- 24. Describe factors affecting spread of Local Anaesthetics and the causes of failed regional block.
- 25. What are the factors affecting the uptake of anaesthetic gases?
- 26. Describe Neuromuscular transmission and factors modifying neuromuscular blocking action of muscle relaxation.
- 27. Write a note on John Snow.
- 28. Write a note on Supraglottic airway devices.
- 29. Describe the types of needle used for central neuraxial blockade.

30. What are the electrical hazards and their precautions in the OT?

### **PATHOLOGY**

Paper-I: General Pathology

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Opportunistic infections in AIDS.
- 2. Immune tolerance.
- 3. Factors predisposing to Thrombosis.
- 4. Use of Microarray technique in pathology.
- 5. Mechanisms of DNA repair.
- 6. Nephelometry.
- 7. HbA1c and it's Diagnostic significance.
- 8. Acute Radiation injury.
- 9. Granulomatous inflammation.
- 10. Apoptotic pathways and role of Apoptosis in Health and disease.

# M.D. DEGREE EXAMINATION – APRIL, 2015 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 114. Describe different Magnets and Coils in MRI.
- 115. Discuss the Cross sectional anatomy of Neck spaces.
- 116. DSA (Digital Subtraction Angiography).
- 117. Write short notes on:
  - a) Diffuse Idiopathic Skeletal Hyperostosis (DISH)
  - b) Biological effects of radiation
  - c) Radiological anatomy of Adrenals
  - d) Digital tomosynthesis
- 118. BIRADS classification.
- 119. Uterine artery embolization.
- 120. Describe the radiological anatomy of esophagus. Discuss the investigations of esophagus.
- 121. Identification of Broncho Pulmonary Segments of Frontal and Lateral Chest Radiographs.
- 122. Classification of Skeletal dysplasia.
- 123. Write short notes on:
  - a) Isotopes in myocardial ischaemia
  - b) Radiation protection
  - c) Osteoid osteoma
  - d) Fibrous dysplasia

- - -

# M.D. DEGREE EXAMINATION – APRIL, 2015 PULMONARY MEDICINE Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81) Bronchopulmonary Segments.
- 82) Flow Volume Loop.
- 83) Diagnostic Bronchoscopy in suspected Lung cancer.
- 84) Hypercapnic Respiratory failure.
- 85) Montelukast.
- 86) Caseation necrosis.
- 87) Oxygen Dissociation Curve.
- 88) Pulse Oxymetry.
- 89) Oxygen toxicity.
- 90) Diaphragmatic Hernia.

# M.D. DEGREE EXAMINATION – APRIL, 2015 MICROBIOLOGY

Paper-I: General Microbiology and Immunology

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. ELISA in Microbiology.
- 2. Direct smear.
- 3. Tumour antigen.
- 4. Regulation of the Complement system.
- 5. Uses of radiation for sterilization.
- 6. Regulatory T Cells.
- 7. Modification of PCR techniques.
- 8. Adaptive Immunity.
- 9. Type III Hypersensitivity reaction.
- 10. Systemic Autoimmune disorders.

# M.D. DEGREE EXAMINATION – APRIL, 2015 SOCIAL & PREVENTIVE MEDICINE

Paper-I: Basic Sciences applied to Social & Preventive Medicine

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81) What are the criteria and measures to be taken to ensure Safe water and sanitation by Educational Institutions?
- 82) Discuss the model of Web of causation with reference to Coronary Artery Disease. Add a note on Primordial prevention.
- 83) List the Morbidity Indicators. Add a note on International Classification of Diseases.
- 84) Discuss and review the measures taken by the Government to address Malnutrition in our country.
- 85) What is Model Health Village Concept? Explain with Example.
- 86) Discuss the importance of Health Seeking Behaviour of Community in implementing Health Programmes in a country.
- 87) What is SWOT Analysis? What is the Structure of SWOT Analysis?
- 88) Discuss the role of Social Class difference in utilization of Health Care Services by suitable example.
- 89) Critically review the role of media in Health Awareness of the Community.
- 90) What is Notification of Diseases? Discuss the same with respect to different conditions.

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# M.D. DEGREE EXAMINATION – APRIL, 2015 PSYCHIATRY

Paper-I: Neuro sciences and behavioral sciences as applied to psychiatry.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Cerebral correlates of emotion.
- 22) Eric Berne.
- 23) Stages of sleep.
- 24) The Skinner box.
- 25) Agnosia.
- 26) Functional Magnetic Resonance Imaging (FMRI)
- 27) Neuroplasticity.
- 28) Internal capsule.
- 29) Gene therapy.
- 30) Long Term Potentiation (LTP).

# M.D. DEGREE EXAMINATION – APRIL, 2015 BIOCHEMISTRY

Paper-I: Physical chemistry and organic chemistry.

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81) Types and applications of Immunoelectrophoresis.
- 82) Ion sensitive electrodes in Blood gas analysis.
- 83) Composition and functions of Specialized proteins in Extracellular matrix.
- 84) Methods to determine Primary structure of Proteins.
- 85) Pre-analytical variables.
- 86) Cytochrome P 450 Mono-oxygenase system.
- 87) Shuttle systems across Membrane.
- 88) Principle and applications of HPLC (High performance liquid chromatography).
- 89) Derive Michaelis Menten equation. Add a note on significance of Km and Vmax.
- 90) Methods and principles of estimation of Glycated Hemoglobin and its Clinical significance.

### PHARMACOLOGY

Paper-I: Pharmacology General Principles and Experimental

Pharmacology including Biostatistics and Bio-assay.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

1) Vectorial transport of drugs.

- 2) Therapeutic drug monitoring.
- 3) Sources of drug information.
- 4) Genetic polymorphism and drug therapy.
- 5) Random stratified sampling.
- 6) Vasopeptide inhibitors.
- 7) Quantitative parameters of drug action.
- 8) Drugs as diagnostic agents.
- 9) Melatonin.
- 10) Fiducial limits of Bioassay.

#### FORENSIC MEDICINE

Paper-I: Applied Osteology, Physiology, Anthropology, Forensic Radiology and Medicine in relation to Forensic Medicine.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81) Changes in the Circulatory system after birth.
- 82) Dating of human bones.
- 83) Role of radiology in Gunshot wounds.
- 84) Physiology of Gastric emptying.
- 85) Role of Radiology in Age determination.
- 86) Skull sutures.
- 87) Anatomy of Neck structures.
- 88) Anesthetic deaths.
- 89) Absorption elution technique.
- 90) Stature from long bones.

#### **PHYSIOLOGY**

Paper-I : General Physiology and recent advances including nerve, Muscle Physiology.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

Draw neat diagrams wherever necessary

All questions carry equal marks

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 31) Goldman Hodgkin Katz (GHK) Equation.
- 32) Homeostatic Regulation.
- 33) Ficks Law of Diffusion.
- 34) Mode of action of chemical messengers.
- 35) Total body water.
- 36) Graded potential.
- 37) Neurotrophins.
- 38) Neuromuscular blockage.
- 39) Dihydropyridine Ryanodine Receptors.
- 40) Types of skeletal muscle fibres.

#### **RADIOTHERAPY**

PAPER-I: BASIC SCIENCES

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 11) What are the risk factors for the development of cancer of the endometrium? Write the staging system used for Endometrial cancer.
- 12) Write in brief on Wedges.
- 13) What is meant by sievert? How is it obtained? Write the annual limits of radiation exposure to different population sub-groups, as recommended by the NCRP.
- 14) Thermo-luminescent dosimeters.
- 15) What are the risk factors for the development of Breast cancer?

  Write the pathological classification of Breast tumours.
- 16) What is meant by Screening for cancer? What are the pre-requisites for Screening? Write a brief note on Prostate specific antigen.
- 17) P value.
- 18) Describe the lymphatic drainage of Tongue. Mention the acute and late effects observed following radical radiation treatment of head and neck cancers.
- Enumerate the different strategies for modifying Radiation response.
   Write briefly on Amifostine.
- 20) What is meant by isodose curves? What are the factors affecting the isodose distribution?

# M.S. DEGREE EXAMINATION – APRIL, 2015 GENERAL SURGERY

Paper-I: Basic Medical Sciences as applied to General Surgery

Time: 3 Hours Max.

Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81) Anatomy of Femoral Triangle.
- 82) Segmental Anatomy of liver.
- 83) Calcium Homeostasis.
- 84) Physiology of Adrenal Cortex.
- 85) Liver function tests.
- 86) Immunohisto chemistry.
- 87) Discuss Anaerobic infections in surgery.
- 88) Proton pump inhibitors.
- 89) Anticancer Antibodies.
- 90) Nosocomial Infections.

#### **ORTHOPAEDICS**

Paper-I: Basic Medical Sciences

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 61) 99Tc Bone Scan in Orthopaedics.
- 62) Blood supply of Neck of Femur.
- 63) Bone graft substitutes.
- 64) Smith Petersen Approach to Hip.
- 65) Sesamoid bones.
- 66) Fracture healing in long bones.
- 67) Renal Rickets.
- 68) Coagulation mechanism and Thromboprophylaxis.
- 69) Arches of foot.
- 70) CPM (Continuous Passive Motion).

# M.S. DEGREE EXAMINATION – APRIL, 2015 OPHTHALMOLOGY

Paper-I: Basic Medical Sciences in relation to Ophthalmology.

Time: 3 Hours Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat and labeled diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 81) Transposition of lenses.
- 82) Hypermetropia.
- 83) Ultra-structure of retina.
- 84) Development of lens.
- 85) Lymphatic drainage of the Eye.
- 86) Corneal transparency.
- 87) Stereopsis.
- 88) Latanoprost.
- 89) Apraclonidine.
- 90) Intra-ocular pressure.

### OTORHINOLARYNGOLOGY

Paper-I: Basic Medical Sciences applied to ENT diseases

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Vidian Nerve.
- 22) Mechanism of phonation.
- 23) Surgical anatomy of the Triangles of neck.
- 24) Systemic Antifungal therapy.
- 25) Vestibular Rehabilitation therapy.
- 26) Inner ear fluids.
- 27) Bacterial biofilms.
- 28) Alternate taste pathway.
- 29) Vestibular evoked myogenic potential.
- 30) Botox.

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#### **ANATOMY**

Paper-I: Surgical and applied Anatomy.

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Pleural Recesses.
- 22) Abdominal Incisions.
- 23) Lymphatic drainage of Stomach.
- 24) Superficial Perineal pouch in male and extravasation of urine.
- 25) Supports of Uterus.
- 26) Carpal tunnel syndrome.
- 27) Trendelenburg test.
- 28) Applied anatomy pertaining to Thyroid gland.
- 29) Movements of vocal cord and muscles causing them.
- 30) Locking and Unlocking at Knee joint.

### D.V.L.

# Paper-I – Basic Sciences related to Dermatology, STD (Venereology) and Leprosy

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

# WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Percutaneous absorption.
- 22) Dendritic cells of the Epidermis.
- 23) Biosynthesis of melanin.
- 24) Hair follicle.
- 25) Dermo Epidermal junction.
- 26) Serodiagnosis of Leprosy.
- 27) Describe eosinophil and its role in skin problems.
- 28) Vaccines in leprosy.
- 29) Anatomy of Male genitalia.
- 30) Structure of HIV virus.

#### HOSPITAL ADMINISTRATION

Paper-I – General Administration and Management in Hospital field

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 21) Discuss the various types of skills which are required for Effective leadership in an organization.
- 22) Discuss the role of Hospital administrator in conflict resolving process.
- 23) Principles of management and their relevance in Health care institution.
- 24) Define Healthcare marketing. Outline the role of Marketing department towards achieving yearly targets.
- 25) Define Delegation. Outline the various factors to be considered by the delegator before Delegation.
- 26) Define Motivation. Write briefly on the theories of Motivation.
- 27) What is Staffing? Outline the steps you would undertake to oversee the smooth functioning of the Human Resource Department.
- 28) As an Administrator, how would you bring about cost/quality consciousness among health care personnel?
- 29) Communication is the key to run organizations effectively and successfully. Discuss.

30) Define Management by objectives (MBO). Discuss its relevance in modern management.

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# M.D. DEGREE EXAMINATION – APRIL, 2015

#### **EMERGENCY MEDICINE**

Paper-I – Basic Sciences as relevant to Emergency Medicine

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

#### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Anatomy of the Cerebral circulation and clinical features of various Stroke syndromes.
- Physiology of Bilirubin metabolism and approach to a case of Jaundice in the emergency department.
- 3) Pathophysiology of Tuberculosis and common presentations to the emergency department.
- 4) Pharmacology of Vasopressors
- 5) Biochemical parameters of normal Cerebrospinal fluid and interpretation of abnormalities.
- 6) Confidence interval.
- 7) ECG changes and management of Hyperkalemia.
- 8) Anatomical landmarks and technique of Internal jugular and Subclavian vein cannulation.
- 9) Physiology of Thyroid hormone production and clinical features of

Myxedema.

10) Classification and treatment of Lactic acidosis.

### TRANSFUSION MEDICINE

Paper-I – Basic applied aspects related to Transfusion Medicine

Time: 3 Hours Max. Marks:

100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

### WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) Explain the principal metabolic pathways for Red Cells and platelets.
- 2) Explain the Cell based model of Coagulation.
- 3) Pathophysiology of Non-immune Hemolytic transfusion reaction.
- 4) Serum haptoglobulins.
- 5) Rh null Syndrome.
- 6) Transfusion associated GVHD and its prevention.
- 7) Explain the Genetic basis for Bombay and para Bombay Phonotypes?
- 8) Biochemical and haemotological changes during storage of Red blood cells.
- 9) Immuno modulatory effect of Blood transfusion.
- 10) Role of HLA system and its significance in Blood transfusion services.