

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

ANATOMY

PAPER – II

(Embryology, Comparative Anatomy and Principles of Physical Anthropology)

Q.P. Code: 1202

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Describe development of kidney. Add a note on its congenital anomalies.
2. Describe comparative anatomy of skin and its appendages.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Somites.
4. Yolk sac.
5. Development of portal vein.
6. Pelvimetry.
7. Development of tongue.
8. Body Mass Index (BMI).

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

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PATHOLOGY

PAPER – II

*(Hematology / Clinical Pathology / Cytology / Transfusion Medicine
Recent Advances and applied pathology)*

Q.P. Code: 1214

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Discuss lipid profile in health and disease.
2. Discuss role of laboratory in the differential diagnosis of pancytopenia.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss role of flow cytometry in the diagnosis of acute leukemia.
4. Bence Jones proteins.
5. Discuss quality control in clinical pathology.
6. Utility of bronchoalveolar lavage in diagnosis of pulmonary diseases.
7. Discuss autologous blood transfusion.
8. Role of FNAC in diagnosis of salivary gland tumors.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

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MICROBIOLOGY
PAPER – II
(Systematic Bacteriology)

Q.P. Code: 1218

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number	Marks
LONG ESSAY QUESTIONS:	2 X 20 = 40
1. Enumerate the organisms causing zoonotic diseases. Describe the pathogenesis, various forms of clinical presentations and laboratory diagnosis of Anthrax.	(5+5+5+5)
2. Discuss pathogenesis and laboratory diagnosis of Cholera. Add a note on hybrid variant of <i>V. cholerae</i> and its importance.	
SHORT ESSAY QUESTIONS:	6 X 10 = 60
3. Describe methods of detecting Enterotoxins.	
4. Enumerate ESKAPE pathogens. Discuss Klebsiella pneumonia with reference to drug resistance.	
5. Explain laboratory diagnosis of plague.	
6. Describe blood culture techniques.	
7. Classify non-tuberculous mycobacteria. Describe clinical presentation and laboratory diagnosis of infections caused by NTM.	
8. Describe laboratory diagnosis of syphilis.	

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PHARMACOLOGY

PAPER – II

*(Systemic Pharmacology – I: Autonomic and central nervous system,
cardio vascular systems, respiratory and gastrointestinal systems
including diuretics and blood)*

Q.P. Code: 1222

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Discuss the salient features of pharmacological action of ACE-inhibitors. (15+5)
Add a note on its effect on ventricular remodeling phenomenon?
2. Discuss the pharmacotherapy of bronchial asthma. Add a note on drugs (12+8)
contraindicated in bronchial asthma?

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss the mechanism of action, clinical uses and adverse effect of various Atropine substitutes.
4. Discuss the pharmacotherapy of Thrombolytic drugs.
5. Enumerate the salient features of the pharmacotherapy of Selective Serotonin Reuptake Inhibitors.
6. Discuss the pharmacotherapy of drugs used in treatment of Parkinsonism.
7. Discuss the pharmacotherapy of HMGCo-A reductive inhibitors.
8. Discuss the pharmacotherapy of potassium channel activators.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

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FORENSIC MEDICINE
(Basics of Forensic Medicine)

PAPER – II

Q.P. Code: 1226

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Discuss the mechanisms, autopsy findings and medico-legal aspect of death in ligature compression of the neck structures. (10+5+5)
2. Discuss the possible findings in 'Non-Accidental Injury Syndrome' in a 3 year old child, as well as the ethical and legal responsibilities of the medical practitioner considering such a diagnosis. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss sex test in athletic competition.
4. Write a note on disposal of waste materials in mortuary.
5. Explain sharp force injury and manner of death.
6. How can rigor mortis be helpful in determining death interval? Refer to relevant time intervals that can be used as a "spot check".
7. Briefly discuss the relevance of gunpowder tattooing on the skin in association with an entrance gunshot wound caused by a 9 mm handgun.
8. A well-known human rights association has hired you to assess an alleged survivor of torture. Describe your approach to the medical examination of said victim.

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COMMUNITY MEDICINE

PAPER – II

(Diet and nutrition in health and diseases, epidemiology of communicable and non-communicable diseases, occupational health)

Q.P. Code: 1230

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Describe the epidemiologic pattern of various common cancers in India. Describe the screening procedures for early detection of cancers and suggest measures for prevention of the same.
2. Comment in brief about current status of Malaria in India. Discuss the current strategies implemented for prevention and control of Malaria in India.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss Lepra reaction and its management.
4. Define Ergonomics. Discuss the role of Ergonomics in prevention of occupational diseases.
5. Discuss measures for control of Vitamin A deficiency in community.
6. Differentiate 'Food Additives' and 'Food Adulteration' with suitable examples.
7. Discuss epidemiology of MDR-TB (Multiple drugs resistant tuberculosis) and its diagnosis.
8. Describe health problems of agricultural workers in India.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

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ANAESTHESIOLOGY

PAPER – II

(Clinical Practice of Anaesthesia)

Q.P. Code: 1234

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Describe the various types of tracheo-oesophageal fistula. Describe the anaesthetic management and post-operative care of a neonate scheduled for repair of T.O.F.
2. A morbidly obese 30 year old female patient weighing 110 kg is to be posted for laparoscopic bariatric surgery. Discuss the anaesthetic implications and postoperative management.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Explicit and Implicit awareness during general anaesthesia.
4. Discuss the factors and management of post-operative pulmonary complications.
5. Enumerate the various methods to reduce Intra Cranial Pressure (ICP).
6. Discuss the role of Pressure Support Ventilation (PSV) in mechanical ventilation.
7. Write in brief the aetiopathogenesis and treatment of Mendelson's syndrome.
8. Appraise the Goldman's cardiac risk index in anaesthesia.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

DERMATOLOGY, VENEREOLOGY AND LEPROSY

PAPER – II
(Dermatology)

Q.P. Code: 1238

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number	Marks
LONG ESSAY QUESTIONS:	2 X 20 = 40
1. Describe etiopathology and management of Hirsutism.	(10+10)
2. Classify dermatomyositis. Describe clinical features, diagnosis and management of dermatomyositis.	(5+5+5+5)
SHORT ESSAY QUESTIONS:	6 X 10 = 60
3. Discuss clinical features and management of Plantar wart.	(5+5)
4. Zinc deficiency in dermatology and role of Zinc in dermatology.	(5+5)
5. Clinical features, diagnosis and management of Epidermolysis Bullosa Aquisita.	(3+3+4)
6. Classify and describe Idiopathic photodermatoses.	(5+5)
7. Diagnosis, differential diagnosis and management of Hydradenitis suppurativa.	(3+3+4)
8. Discuss etiology, clinical features and management of Bowen's disease.	(3+3+4)

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

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GENERAL MEDICINE

PAPER – II

(Cardio-vascular system, gastro intestinal system, Hepatobiliary, pancreatic disorders, infectious diseases including tropical medicine)

Q.P. Code: 1242

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Describe & define cardiomyopathies. Write a note on clinical features, diagnosis & management of Hypertrophic Cardiomyopathy (HOCM). (5+5+5+5)
2. Enumerate causes of chronic diarrhoea. Describe clinical features, investigations and treatment of Malabsorption syndrome. (5+5+5+5)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Write pathophysiology and management of heart failure. (5+5)
4. Discuss etiopathogenesis, clinical features and management of Nonalcoholic steatohepatitis. (3+3+4)
5. Explain life cycle of Plasmodium. Discuss clinical presentation and treatment of cerebral Malaria. (3+3+4)
6. Discuss management of TB in HIV patient.
7. Enlist complications of portal hypertension. How to manage a case of bleeding oesophageal varices. (5+5)
8. Write the clinical features, echo findings and treatment option in mitral stenosis. (3+3+4)

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

PAEDIATRICS
PAPER – II
(General Pediatrics I)

Q.P. Code: 1246

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number	Marks
LONG ESSAY QUESTIONS:	2 X 20 = 40
1. Write the developmental basis of neural tube CD issues defects. Describe the management of meningomyelocele.	(12+8)
2. How does the upper airway of a child differ from that of an adult? Describe the diagnosis and treatment of acute laryngotracheobronchitis.	(4+8+8)
SHORT ESSAY QUESTIONS:	6 X 10 = 60
3. Red cell distribution width and its clinical implications.	
4. Define recombinant DNA technology and discuss its applications in pediatric practice.	
5. Define Sexual Maturity Rating (SMR) and discuss sexual maturity rating in boys.	
6. Discuss the clinical presentation and management of congenital dislocation of hip.	
7. Discuss Zinc in Paediatrics practice.	
8. Define Fetal therapy. Discuss the types and clinical application of fetal therapy.	

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

PSYCHIATRY
PAPER – II
(Clinical Psychiatry)

Q.P. Code: 1250

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Discuss stages of sexual response cycle and describe clinical features and management of different psychosexual disorders. (6+6+8)
2. Discuss the assessment, differential diagnosis and management of the patient found wandering on the road. (6+6+8)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss trans and possession disorders and their management briefly. (6+4)
4. EEG and brain mapping in psychiatry. (6+4)
5. Discuss sleep hygiene and its importance in psychiatry. (6+4)
6. Discuss negative symptoms of schizophrenia and their management. (5+5)
7. Discuss GANSER syndrome and its relevance. (6+4)
8. Describe clinical features and management of delirium Tremens. (5+5)

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

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RADIO-DIAGNOSIS

PAPER – II

(Cardiovascular system, respiratory system, GIT including hepato biliary, endocrine, chest mammography, lymphatic system, arteriography, phlebograph)

Q.P. Code: 1254

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Describe total anomalous pulmonary venous drainage and imaging findings. (10+10)
2. Discuss pathophysiology and imaging of pituitary adenoma. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Describe radio isotope scanning of Thyroid disorders.
4. Imaging of pulmonary sequestration.
5. Components and imaging of Fallot's tetralogy.
6. Explain arterial Doppler findings in lower limb.
7. Imaging of acute abdomen.
8. Explain lymphangiography procedure.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

RESPIRATORY MEDICINE

PAPER – II

(Non-tubercular Respiratory Diseases)

Q.P. Code: 1258

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Define SLE. Discuss the etiopathology, types, clinical features, diagnosis and management of SLE. Describe in details about pulmonary manifestation of SLE. (10+10)
2. Discuss types of fungal infections of the lung its etiopathogenesis, clinical features, diagnosis and management.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss the pharmacokinetics and pharmaco dynamics of anti TB drugs.
4. Respiratory stimulants.
5. Newer drugs in bronchial asthma.
6. Define HCAP (Health Care Associated Pneumonia). Write its causes, etiopathogenesis, clinical features, treatment and management of the same.
7. Causes and treatment of metabolic acidosis. (5+5)
8. Discuss Water lily sign.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

GENERAL SURGERY

PAPER – II

(Head & neck, adrenal gland, breast, thorax, heart and pericardium)

Q.P. Code: 1262

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number	Marks
LONG ESSAY QUESTIONS:	2 X 20 = 40
1. Classify goiters. Discuss the differential diagnosis, investigations and management of solitary nodule of thyroid gland.	(2+6+6+6)
2. Describe the etiology, clinical features, investigations and management of cleft lip and palate.	(2+2+6+10)
SHORT ESSAY QUESTIONS:	6 X 10 = 60
3. Mention the indications for tracheostomy. Write a brief note on the steps of tracheostomy operation.	(5+5)
4. Mention the indication for intercostal drainage (ICD). Mention briefly the steps of ICD insertion. Add a note on triangle of safety.	(3+3+4)
5. Describe the etiology clinical features investigations and management of breast abscess.	(2+2+2+4)
6. Enumerate the precancerous lesions of the oral cavity. Write a brief note on cancer screening programmes.	(6+4)
7. Classify the fractures of the mandible. Write a note on their clinical features and management.	(3+3+4)
8. Write a brief note on etiology, clinical features, investigations and management of submandibular sialadenitis.	(2+2+2+4)

POST-GRADUATE DEGREE (M.S.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

OBSTETRICS AND GYNAECOLOGY

PAPER – II

(Clinical Obstetrics)

Q.P. Code: 1266

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Discuss briefly the theories of onset of labour. Define and discuss etiopathogenesis of preterm labour. Describe the management and complications of preterm labour. (5+5+10)
2. Describe the NYHA classifications of heart disease. Discuss the clinical features and management of rheumatic heart disease in pregnancy and labour. (5+5+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss the various methods of intrapartum fetal monitoring.
4. Define deep transverse arrest. Discuss the management of deep transverse arrest. (6+4)
5. Discuss Modified Bishop Score.
6. Describe Chorionic villous sampling. Discuss the procedure and enumerate the indications for Chorionic villous sampling. (3+4+3)
7. Describe the procedure of B-lynch procedure in management of PPH. Discuss the advantages of B-lynch suture. (6+4)
8. Discuss the role of umbilical artery doppler and middle cerebral artery doppler in the management of IUGR (Intra Uterine Growth Restriction). (5+5)

POST-GRADUATE DEGREE (M.S.) EXAMINATION – MAY 2022

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OPHTHALMOLOGY

PAPER – II

(Clinical Ophthalmology covering diseases of the eye: disorders of conjunctiva, cornea, sclera, uvea, lens, glaucoma, retina, optic nerve and clinical ophthalmology covering diseases of the adnexia: disorders of lids, lacrimal system, orbit)

Q.P. Code: 1270

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Ocular ischemic syndrome. Discuss etiology, clinical features, diagnosis and management. (5+5+5+5)
2. A 60 year old male came for routine eye examination. Fundus reveals an orange coloured pigmented choroidal mass near macula. A scan shows high initial echoes followed by low internal reflectivity. On USG imaging, a mushroom shaped Choroidal mass is noted. Discuss differential diagnosis and management of this condition. Write a short note on collaborative ocular melanoma study. (9+9+2)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Describe geographic keratitis.
4. Diabetic retinopathy ETDRS classification.
5. Signs of Thyroid exophthalmos.
6. Evaluation of Double Elevator Palsy.
7. Stages of Neo vascular Glaucoma.
8. Progressive outer retinal necrosis.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – MAY 2022

Time: 3 Hours

Max. Marks: 100

ORTHOPAEDICS

PAPER – II

(General Orthopaedics)

Q.P. Code: 1274

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Classify supracondylar fractures of humerus in children and describe management of malunited supracondylar fractures of humerus. (10+10)
2. Describe diagnosis and treatment of recurrent shoulder dislocation. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. External fixators.
4. Discuss the etiology, clinical features and management of Volkmann's Ischemic Contracture.
5. Lisfranc's Fracture Dislocation.
6. Describe the etiology and management of periprosthetic fractures.
7. Investigations in Osteoporosis.
8. DVT prophylaxis.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – MAY 2022

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Max. Marks: 100

OTORHINOLARYNGOLOGY

PAPER – II

(*Otology including recent advances*)

Q.P. Code: 1278

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number

Marks

LONG ESSAY QUESTIONS:

2 X 20 = 40

1. Describe the anatomy of middle ear spaces and explain the clinical importance of middle ear ventilation pathways. (10+10)
2. Discuss the medical and surgical management of otosclerosis and enumerate complications of stapes surgery. (5+8+7)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss the evaluation and rehabilitation of a hearing impaired child. (5+5)
4. Write a short note on Korner's septum, with a neat labelled diagram. (5+5)
5. Write a short note on biochemistry of inner ear fluids.
6. Discuss function of outer hair cells, BERA and draw the diagram of organ of corti. (3+3+4)
7. Write a short note on non-pharmacological treatment of tinnitus.
8. Particle repositioning maneuvers for benign paroxysmal positional vertigo.
