

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

Time: 3 Hours

Max. Marks: 100

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 in detail grey zones and role of ancillary techniques in FNAC of thyroid. Write Bethesda system for reporting thyroid cytology.
2. Classify myelodysplastic syndromes. How do you go about with investigations?

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss HELP Syndrome.
4. Explain Sideroblastic anemia with respect to pathophysiology and lab diagnosis.
5. Explain paroxysmal nocturnal haemoglobinuria (PNH).
6. Discuss FNAC of breast.
7. Discuss diabetic nephropathy.
8. Explain significance of calibration in blood bank.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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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. Classify Spirochetes. Describe the pathogenesis, epidemiology and laboratory diagnosis of Leptospirosis. (4+4+4+8)
2. Classify Mycobacteria. Briefly describe the pathogenesis and laboratory diagnosis of tuberculosis with reference to recent advances in diagnosis of tuberculosis. (2+10+8)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Describe Vancomycin resistant Enterococci (VRE).
4. Describe virulence factors, pathogenicity and laboratory diagnosis of the infection caused by Helicobacter pylori.
5. Discuss pathogenesis and laboratory diagnosis of Melioidosis.
6. Describe pathogenesis and laboratory diagnosis of infection caused by Acinetobacter baumannii.
7. Discuss prophylaxis against Tetanus.
8. Define & classify Halophilic vibrios. Write in detail the cultural characteristics, pathogenesis and laboratory diagnosis of Halophilic vibrios.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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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 various drugs acting on Potassium channels. Enumerate the pharmacological action of Potassium channels? (12+8)
2. Discuss the salient features in treatment and management of HIV infection. Add a note on resistance and mechanism of action of various drugs. (12+3+5)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss the salient features of pharmacotherapy of Anti-coagulants.
4. Discuss the salient features of pharmacotherapy of Iron preparation.
5. Discuss the salient features of pharmacotherapy of Hypolipidemics and non-pharmacological methods in management of Obesity.
6. Discuss the salient features of pharmacotherapy of Anti-helminthic drugs.
7. Discuss the salient features of pharmacotherapy of Opioid partial agonist and agonist-antagonist.
8. Discuss the salient features of pharmacological action of skeletal muscle relaxants.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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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. The death of a man who had been treated surgically in hospital for a heart condition (aortic valve replacement and coronary artery by-pass graft) has been reported to the police for an inquest. The family of the deceased alleges that the surgeon's poor skill caused his death, the surgery was unnecessary and the mechanical heart valve used was improperly manufactured and sterilized. Discuss the role of the doctor in investigating these issues.
2. You are the Medical Officer in a Tertiary Hospital. Two hundred dead bodies following a Tsunami were brought to the hospital. Discuss what procedure you would adopt to hand over the identified dead bodies to the relatives and dispose of the remaining bodies.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Write value of examination of eye at autopsy.
4. Describe briefly the value of microscopy in Forensic pathology.
5. Explain pathophysiology of typical injuries in Shaken Baby Syndrome.
6. It has been said that "contusions cannot be aged accurately". Do you agree? Explain with reasons.
7. Evaluate the significance of the umbilical cord in the medico-legal investigation of infanticide.
8. Describe how the examination of human hair may assist the Forensic Pathologist or Toxicologist.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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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. Enumerate 'Micronutrient Deficiency' disorders/ diseases. Discuss measures undertaken by public sector health services for the prevention and control of the same in India.
2. Discuss in detail 'Cluster Containment Strategy' for preventing spread of Covid 19 infection.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss stroke prevention with special reference to 'NCD Clinic'.
4. Describe Occupational dermatitis it's causes and prevention.
5. Discuss newer anti rabies vaccines and their dose/schedule.
6. Discuss Accident research with special reference to 'Road Traffic Accidents.'
7. Discuss salient features of Employee State Insurance Scheme (ESIS).
8. Discuss supplementary feeding in Aanganwadi and its role in prevention of malnutrition.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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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. Discuss perioperative geriatric problems in 90 years old female patient posted for dynamic hip screw with various techniques of anaesthesia.
2. Describe the anaesthetic management and post-operative care for a patient undergoing posterior cranial fossa surgery for evacuation of meningioma.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Enumerate various blood products and write in brief their uses.
4. Discuss the causes, prevention and management of Ventricular Associated Pneumonia (VAP).
5. Illustrate difficult airway algorithm and its relation in pregnancy.
6. Guidelines for Regional Anaesthesia in a patient on anticoagulant therapy.
7. Discuss the principle of Pre-emptive analgesia and brief the various techniques.
8. Brief the causes and treatment of severe bronchospasm during general anaesthesia.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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. Discuss Aetiology, clinical features and management of generalized Pruritus.	(6+6+8)
2. Discuss aetiology, clinical features, diagnosis and management of Non Cicatricial Alopecia.	(4+4+4+8)
SHORT ESSAY QUESTIONS:	6 X 10 = 60
3. Write an account of clinical features and treatment of Impetigo.	(6+4)
4. Discuss uses and side effects of Colchicine in Dermatology.	(6+4)
5. Describe clinical features and management of Scabies.	(6+4)
6. Discuss aetiology and pathogenesis of allergic contact dermatitis.	(5+5)
7. Discuss clinical features and management of Acrodermatitis enteropathica.	(5+5)
8. Discuss differential diagnosis & treatment of a hypopigmented macule over fare in a 10 year child.	(6+4)

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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Max. Marks: 100

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 aetiopathogenesis clinical features, investigations and outline the management of atrial fibrillation. (5+5+5+5)
2. Discuss the differential diagnosis of chronic diarrhea with blood in stool in 35 year old male. Discuss investigation and management of ulcerative colitis. (5+7+8)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. List the antiplatelet agents; discuss the mechanism of action and side effects of antiplatelets. (4+3+3)
4. Describe etiopathogenesis, enumerate clinical features and outline the management of Autoimmune Hepatitis. (3+4+3)
5. List the etiology, enumerate clinical features, investigations and outline the management of Rickettsial fever.
6. Describe etiology, clinical features, list the investigations and discuss management of acute pancreatitis. (2+3+3+2)
7. Describe etiology, discuss clinical features, investigations and management of Angina. (3+2+3+2)
8. Discuss clinical features, investigations and management of Helicobacter pylori. (3+3+4)

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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. Discuss causes and approach to preschool child with developmental regression. (10+10)
2. Outline 10 steps of management of severe malnutrition as per WHO guidelines in appropriate sequence.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss aetiology and management of non-nutritional rickets.
4. Discuss approach to a child with obesity.
5. Discuss Sexual maturity rating (SMR).
6. Primary & secondary prevention of genetic disorders.
7. Clinical features & management of Homocysteinuria.
8. Differential diagnosis of floppy infant.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

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. Describe female sexual dysfunctions. Discuss the approaches to their evaluation and management. (10+10)
2. Discuss differential diagnosis and management of 25 year old violet male patient. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Describe dependent personality disorder.
4. Discuss differential diagnosis and management of conversion disorder.
5. Discuss non pharmacological management of generalized anxiety disorder.
6. Discuss PET study in psychiatric disorder.
7. Discuss assessment and management of Treatment Resistant Schizophrenia.
8. Discuss depression in Geriatric age group.

POST-GRADUATE DEGREE (M.D.) EXAMINATION – JULY 2023

Time: 3 Hours

Max. Marks: 100

RADIO-DIAGNOSIS

PAPER – II

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

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. What are the causes of secondary Hypertension? Discuss the imaging in secondary Hypertension. (10+10)
2. Enumerate the causes of Haemoptysis. Discuss various imaging modalities in suspected cases of haemoptysis. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Explain Subclavian steal syndrome.
4. Technique of per-cutaneous transfemoral angiography. Enumerate vascular anomalies of lower limb.
5. Describe various views in Mammography.
6. CT scan features of Chronic Pancreatitis.
7. Findings of H.R.C.T. in Interstitial lung diseases.
8. Imaging of Gastro-intestinal Stromal Tumour (GIST).

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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. Describe clinical features, etiology, investigation and management of malignant pleural effusion. (5+5+5+5)
2. Define SLE. Discuss the etiopathology, types, clinical features, diagnosis and management of SLE. Describe in detail about pulmonary manifestation of SLE. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss Asbestosis.
4. Describe IRIS (Immune Reconstitution Inflammatory Syndrome).
5. Discuss Pleurodesis.
6. Describe Trans Bronchial Needle Aspiration (TBNA).
7. Discuss about Cardiopulmonary Exercise testing.
8. Describe Pulmonary Hydatid cyst.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – JULY 2023

Time: 3 Hours

Max. Marks: 100

**GENERAL SURGERY
PAPER – II**

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. a) What is flail chest? b) What are the types of flail chest? c) How would you manage a 40-year old man with right flail chest involving multiple ribs?
2. a) Etiopathology and classification of oral malignancy. b) Reconstruction following excision of cheek and hemi mandible.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Causes of cervical lymphadenopathy.
Clinical features, investigations and management of Hodgkin's lymphoma in an adult man.
4. a) Components of multiple endocrine neoplasia, type 1. b) Clinical features and management of parathyroid adenoma.
5. Enumerate the causes of development of postoperative pulmonary complications. Outline the measures to take to minimize such complications.
6. Classification of Carcinoma of thyroid. Management of medullary carcinoma of thyroid.
7. Diagnostic and therapeutic indications of Video assisted thoracoscopic surgery (VATS).
8. How would you manage a 40 year old lady with 6 cm lump right breast with palpable right axillary lymphadenopathy?

POST-GRADUATE DEGREE (M.S.) EXAMINATION – JULY 2023

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. Describe the pathophysiology of disseminated intravascular coagulation and its management in obstetrics.
2. Critically evaluate the management options for breech presentation at term.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Outlet forceps- Indications or pre-requests.
4. Injectable Iron therapy.
5. Screening tools for preterm labour.
6. Toxoplasmosis in pregnancy.
7. Diagnosis & management of appendicitis in pregnancy.
8. Discuss twin to twin transfusion syndrome.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – JULY 2023

Time: 3 Hours

Max. Marks: 100

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. Classify corneal degeneration; give their clinical features and treatment.
2. Describe the etiopathogenesis, clinical features and management of traumatic optic neuropathy.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Describe blow out feature of orbit.
4. Keratoconus.
5. Band shaped keratopathy.
6. Discuss Lacrimal Gland Tumors.
7. Specular Microscopy.
8. Adjustable sutures in squint surgery.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – JULY 2023

Time: 3 Hours

Max. Marks: 100

ORTHOPAEDICS

PAPER – II

(Musculo skeletal trauma)

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. What is AO system of classification of fractures? How will you manage an intra-articular fracture of lower end of radius? (10+10)
2. Classify Calcaneum fracture. Describe its mechanism of injury, clinical features and management Calcaneum fracture. (5+5+5+5)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Classify physal injury & discuss its management.
4. Discuss the etiology & management of dislocation of patella.
5. Classify meniscal injury and discuss its management.
6. Describe various tractions, uses and their complications.
7. Describe the clinical features and management of fat embolism.
8. Discuss about Gamekeeper's thumb & its management.

POST-GRADUATE DEGREE (M.S.) EXAMINATION – JULY 2023

Time: 3 Hours

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 developmental background of congenital aural atresia. Discuss its management. (10+10)
2. Discuss the lateral skull base approaches, their indications and complications. (10+5+5)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Explain the clinical features and management of acute necrotizing otitis externa.
4. Discuss Impedence audiometry and its clinical importance with various graphs.
5. Summarize the clinical importance of recruitment in ENT practice.
6. Discuss the clinical features and treatment of Lateral sinus thrombosis.
7. Explain indications, procedure and complications of Auditory Brainstem Implant (ABI).
8. Describe virtual cochlear endoscopy.
