

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

**Time: 3 Hours**

**Max. Marks: 100**

**ANATOMY**

**PAPER – III**

*(Histology-General & Systemic, Histological, Museum and  
Embalming techniques, Human Genetics)*

**Q.P. Code: 1203**

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 histology of the cerebral cortex in detail.
2. Describe the histology of the cartilages. Describe special stains used for connective tissue.

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Embalming fluids.
4. Clearing agents.
5. Histology of the Juxta-glomerular apparatus.
6. Pre-natal diagnosis of genetic disorders.
7. Histology of the pituitary gland with functional correlation.
8. Turner's syndrome.

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

**Time: 3 Hours**

**Max. Marks: 100**

**PATHOLOGY**

**PAPER – III**

*(Systemic Pathology – Cardio vascular system, respiratory system,  
gastro-intestinal system including liver & biliary tract, pancreas, renal system, male and  
female genital system and breast. Recent advances and applied pathology)*

**Q.P. Code: 1215**

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

**Question Number**

**Marks**

**LONG ESSAY QUESTIONS:**

**2 X 20 = 40**

1. Discuss etiopathogenesis and diagnosis of rheumatic heart disease.
2. Discuss pathogenesis and morphology of ulcerative lesions of GIT.

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Discuss Hyaline membrane disease.
4. Discuss the recent aspects of pathology of ovarian tumors.
5. Discuss papillary lesions of breast.
6. Discuss Xanthogranulomatous pyelonephritis.
7. Laboratory investigations in a case of male infertility.
8. Discuss the pathogenesis of nonalcoholic fatty liver disease.

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

**Time: 3 Hours**

**Max. Marks: 100**

**MICROBIOLOGY**  
**PAPER – III**  
*(Mycology and Virology)*

**Q.P. Code: 1219**

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

<b>Question Number</b>	<b>Marks</b>
<b>LONG ESSAY QUESTIONS:</b>	<b>2 X 20 = 40</b>
1. Discuss morphology, antigenic structure and pathogenesis of Dengue virus. Add a note on laboratory diagnosis of dengue.	(4+6+4+6)
2. Describe pathogenesis, clinical manifestations and laboratory diagnosis of Aspergillosis.	(6+6+8)
<b>SHORT ESSAY QUESTIONS:</b>	<b>6 X 10 = 60</b>
3. Enumerate causative agents of oculomycosis. Describe pathogenesis and laboratory diagnosis of oculomycosis.	
4. Describe Rhinosporidiosis.	
5. Write laboratory diagnosis of Dermatophytosis.	
6. Describe immunoprophylaxis against Polio.	
7. Describe clinical manifestations and laboratory diagnosis of Hepatitis B virus infection.	
8. Describe NACO strategy for diagnosis of HIV.	

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

Time: 3 Hours

Max. Marks: 100

PHARMACOLOGY

PAPER – III

(Systemic Pharmacology – II: Endocrines, chemotherapy and immunopharmacology)

Q.P. Code: 1223

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number	Marks
<b>LONG ESSAY QUESTIONS:</b>	<b>2 X 20 = 40</b>
1. Discuss the pharmacotherapy of Hormonal contraceptive. Add a note on various treatment modalities of erectile dysfunction?	(12+8)
2. Discuss the pharmacological action, mechanism of action, therapeutic uses, adverse effect and drugs contraindicated for protease inhibitors?	(5+2+5+5+3)
<b>SHORT ESSAY QUESTIONS:</b>	<b>6 X 10 = 60</b>
3. Discuss the pharmacotherapy of Thyroid Inhibitors.	
4. Enumerate the salient features of prophylactic use of antibiotics with suitable examples.	
5. Discuss the salient features of treatment of mixed amoebicides with suitable examples.	
6. Discuss the pharmacotherapy of drugs used in treatment of intestinal nematodes.	
7. Discuss the pharmacotherapy of Vinca alkaloids.	
8. Discuss the salient features of drugs used in treatment of acne.	

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

**Time: 3 Hours**

**Max. Marks: 100**

**FORENSIC MEDICINE**  
(*Laws in relation to Medical Profession*)

**PAPER – III**

**Q.P. Code: 1227**

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. You have just concluded the examination of a male hotel worker who has allegedly sexually assaulted a female guest a few hours earlier. Before completing the medico-legal examination form, the police inform you that another female hotel guest alleges “rape” by the same man the night before. You are also told that a hotel maid has come forward and claimed she was also sexually assaulted the previous week by the same man. None of the female victims have been examined as yet by the doctor.
  - a) Identify the medico-legal issues.
  - b) Discuss how you would plan the examination of these alleged victims and the forensic tests you would perform. (10+10)
2. What is the legal position of “Right to die” in India? Discuss in relation with Aruna Shanbaug’s case. (10+10)

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Define genital trauma scoring.
4. How pre-natal sex determination and foeticide are related?
5. Write the legal and ethical issues in communicable diseases.
6. Explain legal aspects of clinical and autopsy records keeping.
7. Describe important ethical considerations in a case of HIV infection.
8. Discuss issues related to obtaining consent in forensic medical practice.

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

**Time: 3 Hours**

**Max. Marks: 100**

**COMMUNITY MEDICINE**

**PAPER – III**

*(Maternal health, child health, demography and family welfare, care of special groups  
viz. school health, adolescent health and geriatrics, care of disabled, community based rehabilitation,  
tribal health, desert medicine, public health emergencies and calamities)*

**Q.P. Code: 1231**

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 strategies of 'Reproductive and Child Health' (RCH) program phase-II.
2. Enumerate 'National Health Programs'. Discuss briefly the National Family Welfare Program in India.

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Discuss sickle cell disease-action plan in tribal districts of India.
4. Define Juvenile Delinquency. Mention its causes and preventive measures.
5. Describe hormonal contraceptives.
6. Write a short note on NPHCE-'National Program for Health Care of Elderly'.
7. Define 'Gender bias' and its health implications.
8. Discuss 'Disaster Mitigation' with suitable examples.

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

**Time: 3 Hours**

**Max. Marks: 100**

**ANAESTHESIOLOGY**  
**PAPER – III**  
*(Clinical Practice of Anaesthesia)*

**Q.P. Code: 1235**

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 indications and complications of one lung ventilation? Discuss ventilators management during one lung anaesthesia.
2. 75 years old patient is posted for TURP with diabetes controlled on oral agents. Describe the preoperative evaluation and in brief about the management of TURP syndrome.

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Illustrate and specify the liver function tests and its anaesthetic importance.
4. Appraise the merits and demerits of autologous blood transfusion.
5. Critique the uses and disadvantages of double lumen tubes.
6. Anaesthetic implications of Hypothyroidism.
7. Prevention of hypothermia in a child during intraoperative period.
8. Diagnosis and management of Trans Urethral Resection of Prostate Syndrome.

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

**Time: 3 Hours**

**Max. Marks: 100**

**DERMATOLOGY, VENEREOLOGY AND LEPROSY**

**PAPER – III**

*(Venereology and Leprosy)*

**Q.P. Code: 1239**

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 reactions in leprosy and write in detail the clinical features and management of Type II reaction in Leprosy. (10+10)
2. Classify Syphilis. Describe clinical features, histopathology and management of secondary syphilis. (5+5)

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Discuss eye involvement in Leprosy.
4. Discuss National AIDS Control Programme.
5. Aetiology, clinical features and management of perianal ulcers in a homosexual male. (5+5)
6. Clinical features complications and management of lymphogranuloma venereum.
7. Clinical features, histopathology and management of plasma cell balanitis. (3+3+4)
8. Discuss post exposure prophylaxis for HIV.

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

**Time: 3 Hours**

**Max. Marks: 100**

**GENERAL MEDICINE**

**PAPER – III**

*(Central nervous system, respiratory system, immune system,  
connective tissue and joint disorders)*

**Q.P. Code: 1243**

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

<b>Question Number</b>	<b>Marks</b>
<b>LONG ESSAY QUESTIONS:</b>	<b>2 X 20 = 40</b>
1. Classify Pneumonias. Discuss COVID-19 pneumonia under the titles- pathogenesis diagnosis, treatment and complications.	(4+4+4+4+4)
2. Explain SLE. Discuss SLICC criteria drugs associated with SLE, immunological markers and immunosuppressant therapy for SLE.	(5+5+5+5)
<b>SHORT ESSAY QUESTIONS:</b>	<b>6 X 10 = 60</b>
3. Define Bronchiectasis. Enumerate causes, discuss pathogenesis, clinical features and treatment.	(1+3+3+3)
4. Treatment of Status Asthmatics.	
5. Discuss clinical features and treatment of Parkinson's disease.	(5+5)
6. Classify Epilepsy. Role of EEG in diagnosis of Epilepsy.	(5+5)
7. Enumerate causes of Dementia. Write a note on treatable dementia.	(5+5)
8. Explain cytokine release syndrome.	

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

**Time: 3 Hours**

**Max. Marks: 100**

**PAEDIATRICS**  
**PAPER – III**  
*(General Paediatrics – II)*

**Q.P. Code: 1247**

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 Severe Acute Malnutrition. Discuss the management in a case of Severe Acute Malnutrition. (8+12)
2. Enumerate conditions causing arthritis in children. Discuss the treatment modalities of Juvenile Idiopathic Arthritis. (8+12)

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Discuss about liver transplantation in children.
4. Discuss use of intravenous immunoglobulin in children.
5. Discuss the causes and management of nocturnal enuresis.
6. Discuss MR campaign.
7. Discuss clinical features and management of sleep apnea.
8. Discuss clinical features and management of Celiac disease.

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

**Time: 3 Hours**

**Max. Marks: 100**

**PSYCHIATRY**

**PAPER – III**

*(Psychiatric Theory and psychiatric specialties)*

**Q.P. Code: 1251**

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 etiology, clinical features, differential diagnosis and management of Enuresis. (4+4+4+8)
2. Discuss the assessment, differential diagnosis and management of patient having Active Suicidal Ideation. (4+6+10)

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Testamantary capacity.
4. Discuss clinical presentation and management of Neuroleptic Malignant Syndrome. (5+5)
5. Discuss evidence based rehabilitation in Schizophrenia.
6. Crisis intervention and its importance in psychiatry. (6+4)
7. Discuss the method of administration, indications and contraindications of ECT. (5+5)
8. What is aging? Discuss psychological aspects of aging. (4+6)

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

**Time: 3 Hours**

**Max. Marks: 100**

**RADIO-DIAGNOSIS**

**PAPER – III**

*(Genitourinary, retroperitoneum, musculoskeletal system, Obstetrics & Gynaecology)*

**Q.P. Code: 1255**

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. Imaging and types of neuro-cutaneous syndrome. (10+10)
2. Discuss the sonographic/colour Doppler markers of chromosomal anomalies in ANC. (10+10)

**SHORT ESSAY QUESTIONS:**

**6 X 10 = 60**

3. Role of CT scan in supra renal lesions/masses.
4. Differential diagnosis of soft tissue calcifications.
5. Explain normal anatomy of Trans Rectal Ultrasonography.
6. Interventional radiology in uterine Myomas.
7. Imaging findings of foetal death.
8. Describe causes and imaging findings of Acromegaly.

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

Time: 3 Hours

Max. Marks: 100

RESPIRATORY MEDICINE

PAPER – III

(Tuberculosis – Pulmonary and extra pulmonary, and General Medicines)

Q.P. Code: 1259

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 treatment of tuberculosis in following special situations:

- ALD & TB
- Kidney disease & TB
- Pregnancy & TB
- HIV & TB

(5+5+5+5)

2. Describe etiopathogenesis, clinical feature and management of Pott's spine. (5+5+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Discuss the drug Rifabutin under following headings:

- Group of drug
- Mode of action
- Dose
- Administration
- Indications & contraindications
- Usage & Side effects.

4. Discuss formation, different sites, etiopathogenesis and fate of primary complex.

5. Describe laboratory diagnosis of pulmonary tuberculosis.

6. What is silico-tuberculosis? Discuss its etiopathogenesis, clinical features, investigations and its treatment.

7. Discuss the drug Linizolid under following headings:

- Group of drug
- Mode of action
- Dose
- Administration
- Indications & contraindications

8. What is gene expert? Write the principle, methods, interpretation of the result and clinical application of the same. (2+2+2+2+2)

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

Time: 3 Hours

Max. Marks: 100

GENERAL SURGERY

PAPER – III

(Abdomen & Laproscopic Surgery)

Q.P. Code: 1263

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. Mention the indications for resection and anastomosis of small bowel. Mention the different types of anastomosis of small bowel. Explain with appropriate diagrams the different techniques of small bowel anastomosis. (4+6+10)
2. A 70 year old male patient presents with dysphagia. Discuss in detail how you will manage this patient.

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Write a note on indications, types and complications of colostomy. (3+3+4)
4. Describe the etiology, clinical features and management of fissure in Ano. (3+3+4)
5. Briefly explain the embryological development of pancreas. Write a note on annular pancreas. (4+6)
6. Write a note on how you will investigate a 60 year male patient with obstructive jaundice.
7. Enumerate the complications of splenectomy. Add a note on their management.
8. Describe the anatomy of inguinal canal.

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

Time: 3 Hours

Max. Marks: 100

OBSTETRICS AND GYNAECOLOGY

PAPER – III

( Clinical Gynaecology )

Q.P. Code: 1267

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 clinical features and classifications of uterovaginal prolapse. How will you manage a case of primipara of 30 years with 3<sup>rd</sup> degree uterovaginal prolapse? (5+5+10)
2. Define endometrial hyperplasia and describe microscopic features of different types of endometrial hyperplasia. How will you diagnose and manage a case of perimenopausal women with endometrial hyperplasia. (2+3+5+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Enumerate the causes of pruritus vulvae. Discuss the investigations and management of pruritus vulvae. (2+3+5)
4. Define and classify Sexually Transmitted Diseases (STD).
5. Define pyometra. Enumerate the causes of pyometra. Add a note on management. (3+3+4)
6. Classify germ cell tumors of ovary. Discuss the management of germ cell tumours. (5+5)
7. Describe the procedure of Non scalpel vasectomy (NSV). Discuss the risks and advantages of NSV. (5+3+2)
8. Discuss the causes and management of Asherman syndrome.

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

Time: 3 Hours

Max. Marks: 100

OPHTHALMOLOGY

PAPER – III

*(Ocular immunology, neuro-ophthalmology, paediatric ophthalmology, systemic ophthalmology and recent advances)*

Q.P. Code: 1271

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. Mention causes of night blindness. Describe in detail about retinitis pigmentosa-clinical features and management. (4+8+8)
2. A 40 year old female has come to OPD with features of blurred vision, photophobia, ocular pain On Examination there was vitiligo and poliosis. Write differential diagnosis, pathogenesis, HLA association, diagnostic procedure and management. (10+10)

SHORT ESSAY QUESTIONS:

6 X 10 = 60

3. Etiology, differential diagnosis and management of papilledema.
4. Clinical features, management of congenital glaucoma.
5. Evaluation of Epiretinal membrane.
6. Differential diagnosis of Nodule at Limbus.
7. What is A & V phenomena? How will you treat a 6 year old child with V Esotropia?
8. Discuss clinical features, management and recent advances in relation to Capillary hemangioma.

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

**Time: 3 Hours**

**Max. Marks: 100**

**ORTHOPAEDICS**  
**PAPER – III**  
*(Muscular-skeletal trauma)*

**Q.P. Code: 1275**

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

<b>Question Number</b>	<b>Marks</b>
<b>LONG ESSAY QUESTIONS:</b>	<b>2 X 20 = 40</b>
1. Describe etiopathology of Tuberculosis of Thoracolumbar spine and its management.	(10+10)
2. Discuss etiopathology and management of neglected CTEV.	(10+10)
<b>SHORT ESSAY QUESTIONS:</b>	<b>6 X 10 = 60</b>
3. Gout.	
4. Bone cement.	
5. Gait in health and disease.	
6. Describe the clinical features and management of giant cell tumor of lower end radius.	(5+5)
7. Discuss the etiology and management of foot drop.	
8. Cauda Equina syndrome.	

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

**Time: 3 Hours**

**Max. Marks: 100**

**OTORHINOLARYNGOLOGY**

**PAPER – III**

*(RhinoLOGY including recent advances)*

**Q.P. Code: 1279**

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

<b>Question Number</b>	<b>Marks</b>
<b>LONG ESSAY QUESTIONS:</b>	<b>2 X 20 = 40</b>
1. Describe anatomy of sphenoid sinus. Mention clinical importance pertaining to approaches to skull base surgeries.	(10+10)
2. Describe in detail about etiopathogenesis, investigations and management of Epistaxis.	(5+5+10)
<b>SHORT ESSAY QUESTIONS:</b>	<b>6 X 10 = 60</b>
3. Write a short note on components of nasal secretions.	
4. Write a short note on clinical applications of Rhinomanometry.	
5. Write a short note on investigations and treatment of drug induced rhinitis.	(5+5)
6. Write about endoscopic and radiological staging of nasal polyposis.	(5+5)
7. Write a short note on clinical features and management of Allergic Fungal Rhino Sinusitis (AFRS).	(5+5)
8. Write a short note on indications and complications of Balloon sinuplasty.	(5+5)

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