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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (GENERAL MEDICINE) DEGREE EXAMINATION – JULY 2025
PAPER I

Wednesday, July 09, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Instructions

- ✍ Answer all the questions*
- ✍ Write only question number in margin space as it appears in question paper*
- ✍ Write answers in same order as they appear in question paper*
- ✍ Answer to the point, neatly and legibly*
- ✍ Write question or brief title above to each answer*
- ✍ Use line diagrams, tables and flow charts where appropriate*

✍ Long Questions:

1. Define sepsis. Describe the pathophysiology and clinical presentation of multiorgan dysfunction syndrome in sepsis. Briefly discuss an approach to a suspected case of sepsis and new therapeutic targets for sepsis.
2. Classify heart failure based on ejection fraction. Discuss compensatory mechanisms in heart failure. Add a note on “Pillars of heart failure management”.

(15 marks × 2 = 30 marks)

3. Short answer questions:

- 3A. Matrix assisted laser desorption Ionization time of flight (MALDI TOF MS)
- 3B. Kalamazoo technique
- 3C. Forest plot
- 3D. Cabotegravir
- 3E. Diagnosis of brain death
- 3F. Next generation sequencing
- 3G. Briefly describe the clinical significance of drug interactions with examples
- 3H. ANA [Antinuclear antibody]
- 3I. Mitochondrial genes and their inheritance pattern
- 3J. Role of Artificial intelligence in diabetes mellitus

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (GENERAL MEDICINE) DEGREE EXAMINATION – JULY 2025
PAPER II

Thursday, July 10, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Instructions

- ✍ Answer all the questions*
- ✍ Write only question number in margin space as it appears in question paper*
- ✍ Write answers in same order as they appear in question paper*
- ✍ Answer to the point, neatly and legibly*
- ✍ Write question or brief title above to each answer*
- ✍ Use line diagrams, tables and flow charts where appropriate*
- ✍ Long Questions:**

1. Discuss the risk factors, clinical presentations, complications and management of malignant neuroleptic syndrome.
2. Describe the etiopathogenesis, clinical features and management of Restrictive Lung Disease.
(15 marks × 2 = 30 marks)

3. Short answer questions:

- 3A. Microangiopathic haemolytic anaemia: Diagnosis and treatment
- 3B. Discuss primary Vs secondary Adrenal insufficiency
- 3C. Pathogenesis of Hashimoto Thyroiditis
- 3D. Cystic Fibrosis: Diagnosis and Treatment
- 3E. Shrinking lung syndrome
- 3F. Management of Obesity
- 3G. Hairy cell leukaemia
- 3H. Vitamin D deficiency in adults
- 3I. Neuroglycopenia
- 3J. Beri Beri

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (GENERAL MEDICINE) DEGREE EXAMINATION – JULY 2025
PAPER III

Friday, July 11, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Instructions

- ✍ Answer all the questions*
- ✍ Write only question number in margin space as it appears in question paper*
- ✍ Write answers in same order as they appear in question paper*
- ✍ Answer to the point, neatly and legibly*
- ✍ Write question or brief title above to each answer*
- ✍ Use line diagrams, tables and flow charts where appropriate*

✍ Long Questions:

1. Discuss the etiology, clinical presentation, complications and an approach to non-valvular atrial fibrillation. Add a note on newer treatment options of atrial fibrillation.
2. Discuss the pathophysiology, clinical features, staging and management of lupus nephritis.

(15 marks × 2 = 30 marks)

3. Short answer questions:

- 3A. Newer treatment options for Non-alcoholic steatohepatitis
- 3B. Explain the concept of base excess and its clinical relevance
- 3C. Genetics and clinical features of Down syndrome
- 3D. Acute interstitial nephritis
- 3E. Describe CRISPR-Cas9 and its applications in genetic engineering
- 3F. Fibromyalgia
- 3G. Complications of ulcerative colitis
- 3H. IgA nephropathy
- 3I. Differentiate Mitochondrial inheritance from autosomal recessive inheritance
- 3J. Describe the etiology and management of cerebral salt wasting

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (GENERAL MEDICINE) DEGREE EXAMINATION – JULY 2025
PAPER IV

Saturday, July 12, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Instructions

- ✍ Answer all the questions*
- ✍ Write only question number in margin space as it appears in question paper*
- ✍ Write answers in same order as they appear in question paper*
- ✍ Answer to the point, neatly and legibly*
- ✍ Write question or brief title above to each answer*
- ✍ Use line diagrams, tables and flow charts where appropriate*
- ✍ Long Questions:**

1. Discuss Pneumocystis jirovecii infection
2. Discuss applications of Stem Cell Biology in Clinical Medicine.

(15 marks × 2 = 30 marks)

3. Write short notes on:

- 3A. Generalized Anxiety Disorder: Aetiology, pathophysiology, clinical features and treatment
- 3B. Psoriasis
- 3C. Scorpion bite
- 3D. Medical problems associated with rapid ascent to high altitude regions
- 3E. Vaccine associated adverse events
- 3F. Cryptococcal meningoencephalitis
- 3G. Precision medicine
- 3H. Hallmarks of ageing
- 3I. Noninvasive brain stimulation (NIBS)
- 3J. Skin manifestations of internal disease

(7 marks × 10 = 70 marks)

