

MANIPAL ACADEMY OF HIGHER EDUCATION
SECOND MBBS DEGREE EXAMINATION – FEBRUARY 2021
SUBJECT: PATHOLOGY - PAPER II (ESSAY)

Thursday, February 11, 2021

Time: 14:20 – 17:00 Hrs.

Maximum Marks: 80

✍ **Answer ALL the questions.**

✍ **Illustrate your answers with diagrams wherever necessary.**

1. Describe etiopathogenesis and types of infective endocarditis. Add a note on the gross findings in heart in infective endocarditis and differential diagnosis of vegetations on heart valve.

(3+3+2+2 = 10 marks)

2. An 8 year old boy came with a history of puffiness of face with decreased urine output. He gives history of sorethroat 2 weeks back. His urine examination revealed numerous RBCs with mild proteinuria. Renal biopsy was performed which showed increased cellularity of glomeruli with predominance of neutrophils.

2A. What is your diagnosis?

2B. Describe the pathogenesis and laboratory findings in this condition.

2C. What are the features in immunofluorescence and electron microscopy?

(1+5+4 = 10 marks)

3. **Write short notes on:**

3A. Types of emphysema with causes

3B. Warthin Tumor

3C. Pathogenesis of gastric carcinoma

3D. Morphology and complications of Crohn's disease

3E. Sequence of serologic markers in acute hepatitis B with resolution

3F. Classify testicular tumors

3G. Morphology of basal cell carcinoma

3H. Light microscopic evolution of acute myocardial infarction in the first 14 days

3I. Pathogenesis and morphology of benign prostatic hyperplasia

3J. Risk factors for cervical cancer, with a note on oncogenic effects of HPV.

3K. Enlist prognostic and predictive factors in carcinoma breast

3L. Hashimoto thyroiditis.

3M. Morphology of Osteosarcoma

3N. Compare the CSF findings in bacterial and viral meningitis

3O. Differences between complete and partial mole

(4 marks × 15 = 60 marks)



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SECOND MBBS DEGREE EXAMINATION – FEBRUARY 2021
SUBJECT: PATHOLOGY – PAPER I (ESSAY)

Wednesday, February 10, 2021

Time: 14:20 – 17:00 Hrs.

Maximum Marks: 80

✍ **Answer ALL the questions.**

✍ **Illustrate your answers with diagrams wherever necessary.**

1. Define shock. Mention the types and list two causes for each type. List the stages of shock. Discuss the pathogenesis of septic shock.

(1+3+2+4 = 10 marks)

2. A 52-year-old male presented to the medicine OPD with history of fatigue, weakness and a dragging sensation in the abdomen. The investigations revealed moderate anemia, total leukocyte count of $130,000/\text{mm}^3$ and platelet count of $600,000/\text{mm}^3$.

2A. What is the diagnosis in this case?

2B. Discuss the cytogenetics and molecular pathogenesis.

2C. Describe the peripheral smear and bone marrow findings seen in this disease.

2D. Mention the phases of the disease.

(1+3+4+2 = 10 marks)

3. **Write short notes on:**

3A. Selectins in acute inflammation

3B. Enumerate diagnostic criteria of systemic lupus erythematosus

3C. Clinical features and laboratory diagnosis of Hemophilia A

3D. p53 gene in DNA repair

3E. Peripheral smear and bone marrow findings in megaloblastic anemia

3F. Ultrastructural changes in reversible cell injury

3G. Enumerate the categories of tumor markers in cancer diagnosis

3H. Mode of inheritance and types of Gaucher disease

3I. Factors affecting wound healing

3J. Classification of hemolytic anemia

3K. Ultraviolet radiation in carcinogenesis

3L. Sequence of events in type I hypersensitivity reaction

3M. Morphology of Burkitt lymphoma

3N. Enumerate pathophysiologic categories of edema with examples

3O. Granuloma formation in tuberculosis

(4 marks × 15 = 60 marks)

