

MANIPAL ACADEMY OF HIGHER EDUCATION
MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS)
MBBS PHASE I STAGE II DEGREE EXAMINATION - OCTOBER 2021
SUBJECT: PATHOLOGY – PART - II (ESSAY)

Friday, October 01, 2021

Time : 10.30 a.m. – 12.30 p.m.

Max. marks : 60

- ✓ **Answer all the questions**
- ✓ **Draw diagrams wherever appropriate**

1. Define necrosis. State any four differences between necrosis and apoptosis. Mention the type of necrosis associated with the following clinical conditions.
 - 1A. Acute pancreatitis
 - 1B. Myocardial infarction
 - 1C. Brain abscess
 - 1D. Malignant hypertension

(1+2+2 = 5 marks)

2. Explain the following with suitable examples:
 - 2A. Routes of metastasis
 - 2B. Staging and grading of tumors

(3+2 = 5 marks)

3. A 58-year-old male, on routine examination was found to have massive splenomegaly, very high leukocyte count and decreased Leukocyte Alkaline Phosphatase (LAP) score. Describe the aetiopathogenesis including the chromosomal abnormality, blood and bone marrow findings of the possible leukaemia in this patient.

(3+4 = 7 marks)

4. With the help of suitable examples, explain the role of Virchow's triad in arterial thrombosis.
(5 marks)
5. Diagrammatically represent the gross pulmonary findings in primary, secondary and miliary tuberculosis. Draw a diagram of the typical microscopic lesion.
(3+2 = 5 marks)
6. Osteomyelitis illustrates most of the pathologic processes that occur in inflammation. Justify this statement by means of a concept map to highlight the morphologic features and complications of osteomyelitis.
(5 marks)
7. Describe the aetiopathogenesis and clinical features of type 1 diabetes mellitus.
(3+2 = 5 marks)
8. Classify liver cirrhosis. Describe the morphological changes in the liver in a case of cirrhosis.
(3+2 = 5 marks)
9. Describe the predisposing factors, morphology and complications of infective endocarditis.
(5 marks)
10. Describe two immunological mechanisms of glomerular damage in glomerulonephritis. Add a note on the role of mediators in glomerular injury.
(3+2 = 5 marks)

11. A 70-year-old male presented to the urologist with obstructive urinary symptoms. On investigation, his serum Prostate-Specific Antigen (PSA) and alkaline phosphatase (ALP) were markedly elevated. Digital rectal examination revealed an enlarged hard prostate.
- 11A. Identify the condition and describe its morphology.
- 11B. Describe the significance of PSA and ALP in the above condition.
- 11C. List four obstructive urinary symptoms

(4+2+2 = 8 marks)