

Exam Date & Time: 27-Aug-2022 (10:00 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION
MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS) MBBS PHASE I
STAGE II DEGREE EXAMINATION - AUGUST 2022

Saturday, August 27, 2022

Pathology [M2PAT]

Marks: 60

Duration: 120 mins.

PATHOLOGY PART - II (ESSAY)

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

1. In a tabular format, compare apoptosis and necrosis.
(5 marks)
2. A 34-year-old man had multiple injuries including a fracture following a road traffic accident. Some wounds healed by first intention, some by second intention. Later, two nodules developed in different locations, one was diagnosed as foreign body granuloma and another as keloid. His arm was in a plaster cast for 6 weeks during which time the callus formed, and the fracture healed.
2A. Explain briefly the meaning of each of the 5 underlined terms.
2B. Mention the factors that influence the healing of a wound and fracture?
(5+2 = 7 marks)
3. Describe the metastatic cascade. Enumerate the routes of spread of tumors with one example for each.
(2+3 = 5 marks)
- 4A. Describe the peripheral blood and bone marrow picture of chronic myeloid leukemia.
4B. Mention the various stages with the criteria.
4C. Explain the pathogenesis of the disease based on molecular studies.
(4+2+2 = 8 marks)
5. What is the clinical presentation of meningitis? Tabulate the differences between bacterial and viral meningitis based on cerebrospinal fluid (CSF) findings.
(2+3 = 5 marks)

6. Define bronchiectasis. List any four aetiological factors and describe the clinical and morphological features in this condition.
(1+2+2 = 5 marks)
7. A 20-year-old boy presented with pain and swelling in the region of the right knee and an X-ray confirmed a pathological fracture in the upper end of the fibula. The differential diagnosis was giant cell tumor of bone or osteogenic sarcoma. What are the differentiating clinicopathological features of these two tumours?
(5 marks)
8. Describe the aetiopathogenesis and complications of type 2 diabetes mellitus.
(5 marks)
9. Explain adenoma-carcinoma sequence in colorectal cancer and its molecular biology.
(5 marks)
10. With reference to the clinical presentation, zone of involvement, gross and microscopic features, differentiate between benign prostatic hyperplasia and prostatic carcinoma.
(5 marks)
11. Write the classification, causes and consequences of urinary calculi.
(2+1+2 = 5 marks)