Exam Date & Time: 06-Apr-2022 (10:00 AM - 12:30 PM)

Batch 46



## MANIPAL ACADEMY OF HIGHER EDUCATION MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS) MBBS PHASE I STAGE II DEGREE EXAMINATION - APRIL 2022 SUBJECT: PATHOLOGY Wednesday, April 6, 2022Pathology [M2PAT]

## PART - II (ESSAY)

## Answer all the questions. Draw diagrams wherever appropriate

 A 50-year-old patient presents with fever, cough with expectoration and weight loss for 3 months. Physical examination revealed cervical lymphadenopathy, which on biopsy was diagnosed as tuberculous lymphadenitis. In a concept map, depict the definition, microscopic features and different causes of this type of inflammation.

(1+3+3 = 7 marks)

- 2A. Mention the different routes of spread of a malignancy, with an example for each.
- 2B. What are the differences between a carcinoma and a sarcoma?

(3+2 = 5 marks)

- 3. A 44-year-old vegetarian corporate executive has been experiencing tingling and numbress in his hands. On investigation, he was found to have megaloblastic anaemia.
  - 3A. Describe the peripheral blood, bone marrow and biochemical findings in this patient.
  - 3B. Explain the pathological basis for pancytopenia in the above patient.

(6+2=8 marks)

4. Write a brief essay on the role of the 'Virchow's triad' in the causation of venous thrombosis.

(5 marks)

- 5. 45-year- old chronic smoker presented with cough, hemoptysis, chest pain and features of Cushing syndrome. Imaging studies revealed a right lung hilar mass with supraclavicular lymph node enlargement.
  - 5A. What is the probable diagnosis?
  - 5B. Describe the gross and microscopic features of the lesion.
  - 5C. What is the reason for the Cushing syndrome?

(1+3+1 = 5 marks)

 A 20-year-old boy had pain, swelling and a pathological fracture in the upper end of the right fibula. The differential diagnosis was either osteoclastoma or osteosarcoma. Tabulate the clinicopathological differences between these two conditions.

(5 marks)

7. Describe the pathogenesis type 1 and type 2 diabetes mellitus. What are the complications of diabetes mellitus?

(2+3 = 5 marks)

8. Define and classify cirrhosis. What is the pathophysiological basis of ascites and splenomegaly in cirrhosis.

(1+2+2=5 marks)

9. Describe the aetiopathogenesis, morphologic features and complications of infective endocarditis.

(2+2+1 = 5 marks)

10. Differentiate two glomerular diseases that occur in children based on clinical presentation and glomerular changes.

(5 marks)

- 11. A 48-year-old woman presented with bleeding per vagina for three months. Per speculum examination showed an ulceroproliferative growth involving the external os of the cervix, which bleeds on touch.
  - 11A. What is the most probable diagnosis? Describe the aetiopathogenesis of this lesion.
  - 11B. Describe the spectrum of preinvasive lesions which can lead to the above condition.

۰.

(2+3 = 5 marks)