## Question Paper

Exam Date & Time: 29-Feb-2020 (02:00 PM - 04:30 PM)

## MANIPAL ACADEMY OF HIGHER EDUCATION



MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS)
MBBS PHASE - I STAGE - II DEGREE EXAMINATION - FEBRUARY/MARCH 2020
Saturday, February 29, 2020

Pathology [M2PAT] - PART - II (ESSAY)

Section Duration: 120 mins

Max. Marks: 60

Answer all the questions

Draw diagrams wherever appropriate

1. Enumerate the steps of fracture healing in a long bone with the help of a diagram. What are the factors which affect the healing of a fracture?

(4+1=5 marks)

- 2A. List the cardinal signs of inflammation and explain the pathophysiological basis of each.
- 2B. Describe the beneficial and harmful effects of inflammation.

(2.5+2.5 = 5 marks)

3. Explain carcinogenesis with special reference to the role of oncogenes and tumour suppressor genes. Give suitable examples.

(4+1 = 5 marks)

- 4. A 50 year old male presented with<u>anaemia</u>, elevated ESR and <u>osteolytic lesions on the skull</u>. The protein electrophoresis confirmed his diagnosis.
  - 4A. Name the condition and describe its pathogenesis.
  - 4B. Explain the pathophysiological basis of the underlined features.
  - 4C. Mention the finding on protein electrophoresis.

(2+2+1 = 5 marks)

 Classify CNS tumours. Describe the clinicopathological features of glioblastoma multiforme.

(2+3=5 marks)

Observe the clinical features and morphology of bronchiectasis. Mention any four complications.

(1+2+2 = 5 marks)

- 7. A 50 year old chronic alcoholic presented with pain abdomen and jaundice. Biochemical examination revealed altered liver function tests. Computed tomography showed a diffuse nodular liver.
  - 7A. Name the pathological condition in the liver and describe its morphology.
  - 7B. List the spectrum of changes seen in the liver due to alcohol.

(4+1 = 5 marks)

8. Describe the aetiopathogenesis and morphology of Graves' disease.

(2+3 = 5 marks)

- Compare the epidemiology and aetiopathogenesis of gastric and duodenal ulcers.
   (5 marks)
- 10. In a tabular format list the types of aneurysms, their common sites and clinical effects.

(5 marks)

- 11. A 68-year-old obese man presents to the medicine OPD with complaints of passing red coloured urine and vague pain in the right lumbar region. An ultrasonogram of the abdomen showed a large mass in the right kidney.
  - 11A. What is the diagnosis?
  - 11B. Describe the morphology of the possible pathology in the kidney.
  - 11C. Name two paraneoplastic syndromes associated with this condition.

(1+3+1 = 5 marks)

12. With the help of a diagram explain cervical intraepithelial neoplasia (CIN). List the risk factors of CIN.

(3+2 = 5 marks)