

# Question Paper

Exam Date & Time: 03-01-2022 (10:20 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION SECOND MBBS DEGREE (CBME) EXAMINATION – JANUARY 2022 SUBJECT: PATHOLOGY - PAPER I

Marks: 80

Duration: 160 mins.

**All questions are compulsory.**

**Illustrate your answers with diagrams flowcharts, tables, etc., wherever necessary.**

1. A 50 - year-old male presented to the outpatient department with complaints of fatigue and dragging sensation in the abdomen. He has a history of anorexia and weight loss. Clinical examination showed mild pallor and splenomegaly. The laboratory investigations reveal:  
Hemoglobin - 9gm/dl, Total leucocyte count - 85,000 cells/cumm,  
Platelet count - 1,80,000 cells/cumm.  
Differential count showed increase in myelocytes with basophila.  
LAP score was markedly reduced.
  - 1A) What is your diagnosis? Justify your diagnosis. (2)
  - 1B) Discuss the molecular pathogenesis of this disease with the aid of a diagram. (2)
  - 1C) Discuss the stages of this disease. (6)
  
2. Discuss the sequence of vascular events in acute inflammation with possible outcomes. (7+3 = 10 marks)
  
3. **Short Notes:**
  - 3A) In a tabular format compare the differences between benign and malignant tumors. (4)
  - 3B) Enumerate the chemical mediators of acute inflammation and discuss any one in brief. (4)
  - 3C) List 4 tumor markers and explain their utility in clinical practice. (4)
  - 3D) Explain the chromosomal abnormality and clinical features of Trisomy 21. (4)
  - 3E) A 25-year-old female presents with malar rash, fever, joint pains, and positive dsDNA. Explain the pathogenesis of this disease. (4)
  - 3F) An elderly male present with severe pancytopenia and markedly hypocellular bone marrow. Discuss the possible etiopathogenesis of this disease. (4)
  - 3G) Classify and describe the common blood group systems. (4)
  - 3H) Discuss the gross and microscopic features of the types of infarcts with a special note on splenic infarct. (4)
  - 3I) In a tabular format, discuss the distinguishing features between transudate and exudate. (4)
  - 3J) Classify intracellular accumulations citing examples and distinguishing features of each type. (4)
  - 3K) Discuss the pathogenesis and microscopic features of Tuberculoid Leprosy. (4)

- 3L) Morphological and biochemical changes in Apoptosis. (4)
- 3M) Discuss the mode of inheritance and laboratory diagnosis of Hemophilia A. (4)
- 3N) Discuss dystrophic calcification with the help of suitable examples. (4)
- 3O) FAB classification and histochemical stains in Acute Myeloid Leukemia. (4)

-----End-----

# Question Paper

Exam Date & Time: 04-01-2022 (10:20 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION SECOND MBBS DEGREE (CBME) EXAMINATION – JANUARY 2022 SUBJECT: PATHOLOGY - PAPER II

Marks: 80

Duration: 160 mins.

**All questions are compulsory.**

**Illustrate your answers with diagrams flowcharts, tables, etc., wherever necessary.**

1. A 68-year-old man, chronic smoker presented with complaints of difficulty in breathing, cough with expectoration and weight loss. A few weeks later he developed hemoptysis. On chest X-ray, a solitary ill-defined lesion was found in the left upper lobe.
  - 1A) What is the most probable diagnosis? (1)
  - 1B) Discuss the etiopathogenesis of the disease. (4)
  - 1C) List the histopathological types of the disease and describe the morphology of any one type. (2+3 = 5 marks)
  
2. What is nephrosclerosis? Describe the pathogenesis and morphology of malignant nephrosclerosis. (3+2+5 = 10 marks)
  
3. **Short notes:**
  - 3A) Describe the morphology of rheumatic heart disease. (4)
  - 3B) Discuss the stages of lobar pneumonia. (4)
  - 3C) Discuss the pathogenesis and mention four complications of bronchiectasis. (4)
  - 3D) Discuss the etiopathogenesis and four complications of left sided heart failure. (4)
  - 3E) Describe the morphology of seminoma. (4)
  - 3F) A 65 year old lady presented with cervical lesion, which bleeds to touch. Based on the PAP smear cytology report, hysterectomy was performed. Discuss the risk factors and pathogenesis of the disease.
  - 3G) Write the pathogenesis of endometrial carcinoma. (4)
  - 3H) Discuss any four prognostic factors of breast cancer. (4)
  - 3I) Discuss the etiopathogenesis of gastric carcinoma. (4)
  - 3J) Mention two important risk factors of oral cancer and describe the morphology of leukoplakia. (4)
  - 3K) Describe the morphology of cirrhosis. (4)
  - 3L) Mention four important differences between crohn disease and ulcerative colitis. (4)
  - 3M) Describe the morphology of basal cell carcinoma. (4)
  - 3N) Discuss the pathogenesis and morphology of Ewing's sarcoma. (4)
  - 3O) A 52 year old bank employee has lost four kilogram body weight over a month and has disturbed sleep as he wakes up at least three times to pass urine. What is the possible diagnosis? Write its pathogenesis.(4)

-----End-----