

Question Paper

Exam Date & Time: 25-Jan-2024 (10:20 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION
SECOND PROFESSIONAL YEAR MBBS DEGREE EXAMINATION - JANUARY/FEBRUARY 2024
SUBJECT: PATHOLOGY - PAPER I
(CBME BATCH)

Marks: 100

Duration: 180 mins.

All questions are compulsory.

Illustrate your answers with diagrams flow charts, tables etc wherever necessary

- 1) A four-year old male child presented to the OPD with history of fatigue and abdominal distension. He had a history of repeated blood transfusions. On physical examination there was hepatosplenomegaly with frontal bossing. X-ray of the skull showed hair-on-end appearance. His laboratory investigations were as follows: Hb-7 gm/dl, reticulocyte count- 9% and serum total bilirubin-3 mg/dl
- 1A) What is your diagnosis? Justify (2)
- 1B) Describe the peripheral smear findings of this condition? (3)
- 1C) Discuss the confirmatory tests to support your diagnosis with interpretation of the tests. (3)
- 1D) What is the cause of hair-on-end appearance on X-ray? (2)
- 2) Define shock. Mention the types of shock with the help of suitable examples. Describe the pathogenesis of septic shock with the help of a flowchart. (2+3+5 = 10 marks)
- 3) **SHORT NOTES:**
- 3A) Explain the steps involved in phagocytosis (4)
- 3B) Summarize in brief the different types of cellular adaptations with suitable examples. (4)
- 3C) In a tabular format discuss the differences between necrosis and apoptosis (4)
- 3D) Distinguish between wound healing by primary and secondary intention (4)
- 3E) Discuss the events contributing to thrombus formation (4)
- 3F) Describe the morphologic features of Amyloidosis in kidney and spleen with the help of suitable diagrams (4)
- 3G) Tabulate the differences between benign and malignant tumors (4)
- 3H) Enumerate FOUR tumor markers that aid in the diagnosis of cancers (4)
- 3I) Explain the genetic abnormality and clinical features in Down syndrome (4)
- 3J) Discuss the sequence of the various phases in Chronic myeloid leukemia (4)
- 3K) Illustrate the pathophysiology of DIC with the help of a flow chart (4)
- 3L) Discuss the indications and uses of the various blood components in transfusion (4)
- 3m) Classify Hodgkin lymphoma based on morphology, immunophenotype and clinical features (4)
- 3N) Enumerate the differences between transudate and exudate (4)
- 3O) Discuss and interpret the various tests in the diagnosis of Hemophilia (4)

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MANIPAL ACADEMY OF HIGHER EDUCATION
SECOND PROFESSIONAL YEAR MBBS DEGREE EXAMINATION - JANUARY/FEBRUARY 2024
SUBJECT: PATHOLOGY PAPER II
(CBME BATCH)

Marks: 80

Duration: 160 mins.

Answer all the questions.

Illustrate your answers with diagrams wherever necessary

- 1) A 52-year-old female presented a mass in the upper outer quadrant of right breast. The mass was hard and was fixed to the underlying tissue and skin above the mass showed puckering. Discuss the etiopathogenesis, morphology and prognostic factors of the above disease. (4+4+2 = 10 marks)
- 2) A 34-year-old executive man presented with history of severe epigastric pain and vomiting. Upper Gastrointestinal endoscopy revealed a non-bleeding punched out gastric ulcer at 2 cm from pylorus.
 - 2A) What is the diagnosis? (1)
 - 2B) Discuss the etiopathogenesis of the diagnosis. (4)
 - 2C) Discuss the morphology of the disease. (5)
- 3) **Write short notes on:**
 - 3A) Describe the morphology of osteosarcoma with the aid of a diagram (4)
 - 3B) Enumerate the CSF findings in tuberculous meningitis (4)
 - 3C) List the complications of myocardial infarction (4)
 - 3D) Discuss the renal changes in diabetes mellitus (4)
 - 3E) A 74 year old female presented with abnormal vaginal bleeding. On examination was found to have an ulceroproliferative cervical mass with abnormal pap smear findings. Describe the morphology of the lesion with the aid of a diagram (4)
 - 3F) In a tabular format, compare the differences between Crohn disease and ulcerative colitis. (4)
 - 3G) A 75 year old man presented with a 6cm irregular pigmented lesion on the upper back with notched borders and variegated appearance, associated with a recent increase in size and pain. Explain the morphology of the above lesion with the aid of a diagram (4)
 - 3H) Discuss the causes of vegetative heart diseases with the help of a diagram (4)
 - 3I) Describe the morphology of prostatic carcinoma with the aid of a diagram (4)
 - 3J) Discuss the types of Emphysema (4)
 - 3K) Outline the classification of cirrhosis. (4)
 - 3L) Discuss the diagnostic pathologic criteria of rheumatic heart disease. (4)
 - 3M) Outline the classification of ovarian tumors (4)
 - 3N) List the risk factors of atherosclerosis (4)
 - 3O) Describe the morphology of small cell carcinoma of lung with the aid of a diagram (4)

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