

Pathology: Paper II

Date: 29.06.201.

Time: 03 hours

ANSWER ALL THE TEN QUESTIONS

Answer Each Part in Separate Answer Book

Part A

1. 1.1. Mention three examination findings those in favour of breast carcinoma (15 Marks)
- 1.2. Briefly explain your findings in (1.1.) on the basis of pathology. (30 Marks)
- 1.3. What are the ways available for biopsy in breast carcinoma and indicate their advantages and disadvantages. (30 Marks)
- 1.4. Briefly describe how breast carcinoma is classified. (25 Marks)
2. 2.1. Give a short account on “Helicobacter pylori”. (25 Marks)
- 2.2. Briefly describe the pathophysiological mechanism of peptic ulcer disease (40 Marks)
- 2.3. Briefly describe the macroscopic appearance of Benign Chronic Gastric ulcer (35 Marks)

Part B

3. 3.1. What is urolithiasis ? (10 Marks)
- 3.2. Mention the types of stones formed in the urinary tract. (20 Marks)
- 3.3. Briefly describe the causes and pathogenesis of stone formation. (40 Marks)
- 3.4. Briefly discuss the complications caused by the stones in the urinary tract. (30 Marks)
4. 4.1. Briefly describe the pathogenesis of wound healing. (40 Marks)
- 4.2. Enumerate the factors affecting the wound healing. (25 Marks)
- 4.3. Discuss briefly the complications of wound healing. (35 Marks)

Part C

5. Briefly discuss the Nonmetastatic effects of the malignant tumors. (100 Marks)

Part D

6. A 21 year old medical student presents with loss of weight, a chronic cough, low grade fever and enlarged cervical lymph nodes of the right side.
A Fine needle aspiration performed on one of the nodes reveals Granulomatous inflammation.
- 6.1. What is the most likely diagnosis ? (10 Marks)
- 6.2. Name 2 other investigations (other than histology) that would help to confirm your diagnosis. (10 Marks)
- 6.3. Describe the histology of this patient's lymph node. (20 Marks)
- 6.4. What special stain is useful to confirm the diagnosis in tissue sections. (10 Marks)
- 6.5. Describe briefly the possible pathological changes in the lungs of this patient. (50 Marks)
7. 7.1. Define apoptosis (10 Marks)
- 7.2. List the differences and similarities between apoptosis and necrosis. (40 Marks)
- 7.3. Give 2 clinical examples of apoptosis. (10 Marks)
- 7.4. Describe the microscopic changes that occur in apoptosis. (20 Marks)
- 7.5. Describe briefly the importance of apoptosis in carcinogenesis. (20 Marks)
8. A 65 year old male with long standing hypertension which has been poorly controlled presents with a "stroke" (cerebrovascular disease). The CT scan of the brain reveals a cerebral infarct.
- 8.1. Define cerebrovascular disease (10 Marks)
- 8.2. Describe how this patient's hypertension contributed to the development of a cerebral infarct (30 Marks)
- 8.3. List 4 other important effects of hypertension on the brain (20 Marks)
- 8.4. Describe the evolution and appearances (macroscopic and microscopic) of a non haemorrhagic infarct in the brain. (40 Marks)

Part E

9. A 60 year old man presented with loss of weight and night sweats of 8 months duration. He gives a history of abdominal distension following small meals. On examination he was pale and was found to have hepatosplenomegaly. The blood picture was reported as “leuko erythroblastic”.

His investigations are as follows:

Hb – 8 g/dl WBC – 3,700/ mm³ N – 70% Myelocytes
12% Eosinophils 3% Lymphocytes – 15% Platelets –
50,000 mm³

- 9.1 What is the most likely diagnosis? (10 Marks)
- 9.2 Briefly explain the reasons for his full blood count (25 Marks)
- 9.3. Briefly explain the reasons for his organomegaly (20 Marks)
- 9.4. What is meant by the term “leuko erythroblastic blood picture”? (20 Marks)
- 9.5. List 3 other conditions in which you would find a leuko erythroblastic blood picture (15 Marks)
- 9.6. List 2 complications that can occur in this patient? (10 Marks)
10. A 70 year old man presents with backache and shortness of breath on exertion. He was found to have disseminated malignancy.
- 10.1 Give 2 morphological types of anaemia that he may have. (10 Marks)
- 10.2 Give reasons for the types of anemia that you have mentioned above (40 Marks)
- 10.3 List 3 investigations to confirm one of the anaemias that you have mentioned above. (30 Marks)
- 10.4 List two possible primary sites for his malignancy (20 Marks)