

UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES PART II—FEBRUARY 2011
PATHOLOGY Paper II

Date: 22.02.2011.

Time: 03 hours

ANSWER ALL THE TEN QUESTIONS

Answer each QUESTION in separate answer book

- 1. A patient is found to have a mid-diastolic murmur and is diagnosed as having mitral stenosis. He has a past history of Rheumatic Fever.**
 - 1.1. List 2 other possible causes for mitral stenosis. (20 Marks)**
 - 1.2. List 2 complications of mitral stenosis. (20 Marks)**
 - 1.3. Describe the microscopic and macroscopic changes of the heart in Acute Rheumatic Fever. (50 Marks)**
 - 1.4. List 2 other organs I tissues involved in Acute Rheumatic Fever. (10 Marks)**

- 2. A 68 year old known Diabetic patient presented with chronic cough, loss of weight and low grade fever. Chest X Ray revealed upper lobe shadows with cavitation. A clinical diagnosis of pulmonary Tuberculosis was made.**
 - 2.1. List 2 investigations that would help to confirm the diagnosis. (20 Marks)**
 - 2.2. Describe the pathological features of secondary (post primary) pulmonary Tuberculosis. (40 Marks)**
 - 2.3. List 2 other pathological conditions of the lung that can cause granulomatous inflammation. (20 Marks)**
 - 2.4. Enumerate the pathological sequelae of secondary pulmonary Tuberculosis. (20 Marks)**

- 3. 40 year old female admitted with lump in the right breast of six months duration.**
 - 3.1. Mention 5 physical signs to suggest it's clinically malignant lesion. (20 Marks)**
 - 3.2. Explain the above physical signs on the basis of the pathology. (60 Marks)**
 - 3.3. What is the significance of receptor studies in breast carcinoma? (20 Marks)**

- 4. 4.1. What laboratory investigations help to diagnose obstructive jaundice? (30 Marks)**
 - 4.2. Brief out the pathophysiological changes that occur in obstructive jaundice. (35 Marks)**
 - 4.3. Enumerate the causes of cirrhosis of the liver and mention the different macroscopic morphological appearances of the liver in each of them. (35 Marks)**
- 5. A 40 year old male presented with burning epigastric pain related to meals. An endoscopy performed on him revealed an ulcer at gastric antrum. The biopsy done on it revealed a chronic gastric ulcer with no evidence of malignancy.**
 - 5.1. Define Peptic Ulcer. (10 Marks)**
 - 5.2. Describe the macroscopic and microscopic appearances of peptic ulcer in stomach (gastric ulcer). (40 Marks)**
 - 5.3. List 3 natural defenses in the stomach to protect it from gastric acidity. (15 Marks)**
 - 5.4. Describe the pathological mechanism of Helicobacter pylori causing peptic ulcer (15 Marks)**
 - 5.5. Mention 3 other aetiological agents for peptic ulcer disease (10 Marks)**
 - 5.6. Enumerate the complications of peptic ulcer. (10 Marks)**
- 6. 6.1. Define Chronic Kidney Disease. (20 Marks)**
 - 6.2. List the common 5 causes of Chronic Kidney Disease. (30 Marks)**
 - 6.3. What are the consequences and complications of Chronic Kidney Disease? (50 Marks)**
- 7. A 40 year old female presented with excessive weight gain in spite of decreased appetite. Clinical diagnosis of Hypothyroidism was made.**
 - 7.1. List 2 investigations that would confirm the diagnosis. (10 Marks)**
 - 7.2. Mention the changes that you would expect in the investigations you mentioned in 7.1 in primary and secondary hypothyroidism. (20 Marks)**
 - 7.3. List 5 causes of hypothyroidism. (30 Marks)**
 - 7.4. List the clinical manifestations of hypothyroidism in relation to:**
 - 7.4.1. Cardiovascular system (20 Marks)**
 - 7.4.2. Central nervous system (20 Marks)**

8.
 - 8.1. List 5 important differences between benign and malignant tumours. (50 Marks)
 - 8.2. Describe the macroscopic and microscopic appearances of uterine leiomyoma. (40 Marks)
 - 8.3. Mention the name for malignant counterpart of leiomyoma. (10 Marks)

9. A 68 year old man presented with lethargy and shortness of breath on exertion. He mentioned about passing dark colour stools on and off for 6 months. His preliminary investigations revealed;

Hb-5.001;

MCV- 60fl;

1\40-1-20pg:

WBC-7000/mm³

Platelets-520,000/mm³

- 9.1. What is the most likely cause for his anaemia? (10 Marks)
- 9.2. List 2 other causes for microcytic anaemia. (20 Marks)
- 9.3. List 3 biochemical investigations that you would do to confirm your diagnosis mentioned in 7.1 giving the expected findings (30 Marks)
- 9.4. Describe the morphology of the red cells expected in his blood film. (30 Marks)
- 9.5. What is the most likely cause for his thrombocytosis? (10 Marks)

10. A 32 year old lady presented with loss of weight and fatigability of 6 months duration. On examination there was massive splenomegaly.

- 10.1. List 3 conditions that can give rise to massive splenomegaly. (30 Marks)

- 10.2. Her investigations showed:

Hb-10gicil

\NBC-- 480,000/m M³

Platelets-900,000/mm³

Blood picture revealed marked leukocytosis with full spectrum of myeloid series with peaks in neutrophils and myelocytes. Eosinophilia and Basophilic were seen. Blasts were less than 2 %.

What is the most likely diagnosis?

(20 marks)

- 10.3. Mention one investigation from the peripheral blood that would Confirm the diagnosis. (20 Marks)

- 10.4 Briefly explain her massive splenomegaly on the basis of pathology. (30 Marks)