



UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES PART II (2nd) Jan 2012
Pathology: Paper II

Date: 01.02.2012.

Time: 03 hours

ANSWER ALL THE TEN QUESTIONS

Answer each **question** in separate answer book

- 1
 - 1.1 Define Acute Inflammation (20 Marks)
 - 1.2 Mention four chemical mediators involved in acute inflammation and mention their functions (20 Marks)
 - 1.3 Briefly describe the pathological sequelae of Acute Cholecystitis (60 Marks)

- 2 A 45 year old female presented with left sided breast lump which was clinically malignant.
 - 2.1 Mention 3 physical signs that will suggest it is a malignant lump (15 Marks)
 - 2.2 Explain the physical signs mentioned in 2.1 on the basis of pathogenesis (45 Marks)
 - 2.3 Mention the various methods available to collect biopsy to arrive at a pathological diagnosis in this patient (20 Marks)
 - 2.4 Mention the most common histopathological type in carcinoma of the breast (20 Marks)

- 3 A 24 year old boy was transferred to medical casualty ward for management of proteinuria. Ward test revealed urinary protein ++.
 - 3.1 Outline how the proteinuria can be confirmed (20 Marks)
 - 3.2 Briefly describe how the proteinuria can be further evaluated (30 Marks)
 - 3.3 Describe the pathogenesis of the proteinuria (30 Marks)
 - 3.4 List 4 possible causes of massive proteinuria in an adult (20 Marks)

- 4 A sixty year old lady presented with tiredness. On examination she was found to be pale and had multiple small bruises over her arms and legs. Her full blood count was as follows:
Hb-6g/dl, WBC-1100/mm³, Platelets- 20 000/mm³
 - 4.1 Comment on her full blood count (20 Marks)
 - 4.2 List 4 possible causes for the above full blood count (40 Marks)
 - 4.3 List 2 haematological investigations that would be most useful to come to the diagnosis in this patient (20 Marks)
 - 4.4 List 2 complications that this patient may have if she does not receive appropriate treatment (20 Marks)

- 5 A 30 year old lady presented with shortness of breath on exertion. On examination she was found to be pale. Her full blood count is provided: Hb 5.8g/dl, MCV 65 fl, MCH 20 pg, WBC 5900/mm³, Platelets 600 000/mm³
- 5.1 Mention the morphological type of anaemia she has (10 Marks)
 - 5.2 List 2 common causes for the condition you mentioned in 5.1 (20 Marks)
 - 5.3 Enumerate the investigations you would do to differentiate the conditions you mentioned in 5.2 and mention the expected findings in each condition (40 Marks)
 - 5.4 Briefly describe the adaptive responses of the body to compensate anaemia (30 Marks)
- 6 A 40 year old medical officer presented with low grade fever, loss of weight and chronic cough. On examination there was an enlarged right side cervical lymph node. Fine needle aspiration cytology performed on the cervical node revealed granulomatous inflammation.
- 6.1 Mention the most likely diagnosis (10 Marks)
 - 6.2 List 3 other causes for granulomatous inflammation (15 Marks)
 - 6.3 Describe the histology you would expect in this patients' lymph node (25 Marks)
 - 6.4 Mention the special stain that is useful to confirm the diagnosis in tissue sections (10 Marks)
 - 6.5 Describe briefly the possible pathological (macroscopic and microscopic) changes of the lungs in this patient (40 Marks)
- 7
- 7.1 Define the term Meningitis (20 Marks)
 - 7.2 List the most likely organisms responsible for Acute pyogenic meningitis in different age groups (30 Marks)
 - 7.3 Describe the changes in the cerebro spinal fluid of a patient with acute pyogenic meningitis (30 Marks)
 - 7.4 List 5 possible complications of acute pyogenic meningitis (20 Marks)
- 8 A 60 year old male presented with the history of loss of appetite, loss of weight and mild epigastric pain of 3 months duration. He underwent an upper Gastro Intestinal Endoscopy and found to have an ulcer over the lesser curvature of the stomach. Biopsy was taken from the ulcer and sent for histopathological assessment.
- 8.1 Describe the endoscopic (Macroscopic) appearances that are useful to differentiate a malignant gastric ulcer from a benign ulcer (30 Marks)
 - 8.2 Describe the possible histological appearances you may expect in the biopsy report (30 Marks)
 - 8.3 Give a brief account on different modes of spread of a malignant tumour of the stomach (40 Marks)

- 9 A 70 year old female presented with the history of deep jaundice generalized itching, passing dark coloured urine and pale stools of 2 months duration. She also had mild right hypochondrial pain.
- 9.1 List 5 possible clinical entities that could have caused the above condition (20 Marks)
 - 9.2 Give a brief account on the pathological basis of her symptoms (40 Marks)
 - 9.3 Mention the possible changes you will expect in the following laboratory investigations of this patient giving reasons
 - 9.3.1. Prothrombin Time (PT) (10 Marks)
 - 9.3.2. Fat content of stool (10 Marks)
 - 9.3.3. Serum Alkaline Phosphatase (10 Marks)
 - 9.3.4. Urinary urobilinogen (10 Marks)
- 10 Write short notes on
- 10.1 Atherosclerosis (40 Marks)
 - 10.2 Aortic aneurysm (30 Marks)
 - 10.3 Constrictive pericarditis (30 Marks)