

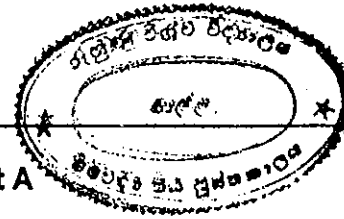


Pathology Paper I

Friday 6th February 2004

9.00am to 11.00 am
2 hours

Answer ALL FOUR questions.
Answer each part in a SEPARATE book.



Part A

1. Write notes on
 - 1.1 Cerebral infarction. (25 marks)
 - 1.2 Hepatocellular necrosis. (25 marks)
 - 1.3 Osteomyelitis. (25 marks)
 - 1.4 Chronic inflammation. (25 marks)

Part B

2. A 50 year-old male was admitted to a medical ward with a severe chest pain while awaiting coronary bypass surgery. He died on the 7th day following admission. He was known to have diabetes mellitus and hypertension.
 - 2.1 Give one probable cause of death in this patient. (10 marks)
 - 2.2 Discuss the pathogenesis of the lesion that indicated a coronary bypass surgery. (40 marks)
 - 2.3 Describe the macroscopic and microscopic changes seen in the heart and lungs of the deceased. (50 marks)

Part C

3. 3.1 A 75 year-old male was found to have a compression fracture of a lumbar vertebra. Digital examination of the rectum revealed an enlarged, hard prostate gland. His serum tartrate labile acid phosphatase concentration was elevated.
 - 3.1.1 a) What is the diagnosis? (05 marks)
 - b) Explain the pathological basis of his clinical features. (30 marks)
 - 3.1.2 List the investigations you would do to confirm the diagnosis. (20 marks)
 - 3.1.3 List three other causes of compression fracture of vertebrae. (15 marks)
- 3.2 Write a note on para-neoplastic syndrome. (30 marks)

Part D

4. 4.1 What is uraemia? (5 marks)
- 4.2 List the three broad categories of causes of uraemia giving an example for each category. (15 marks)
- 4.3 What are the disturbances seen in serum potassium and bicarbonate in chronic renal failure. (20 marks)
- 4.4 Explain the pathophysiology of the biochemical changes leading to renal osteodystrophy in chronic renal failure. (30 marks)
- 4.5 Briefly describe the pathogenesis of anaemia in chronic renal failure. (30 marks)