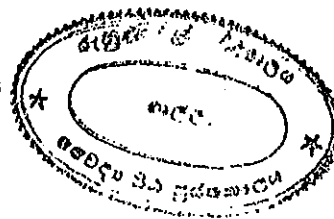


Medicine Paper I
26th January 2004, 0900 – 1200 hours



Answer all ten questions
Answer each part in a separate book

PART A

1. 1.1 List **four** biochemical investigations that would help to distinguish a case of hepatocellular jaundice from obstructive jaundice. (20 marks)
- 1.2 Indicate how each of the tests that you have listed would help to distinguish one from the other. (40 marks)
- 1.3 Explain the pathophysiology of prolongation of prothrombin time seen in obstructive jaundice. (40marks)

PART B

2. A 60 year old man was admitted to hospital with increasing breathlessness over four weeks. On clinical examination he was found to have an irregularly irregular pulse with a heart rate of 120 beats per minute, blood pressure of 170/100 mm Hg, JVP of 5cm, apex beat in the fifth intercostals space 2 cm lateral to the midclavicular line with a grade 2/6 midsystolic murmur. Auscultation of lungs revealed basal creptations, and mild paedal oedema was seen. ECG confirmed atrial fibrillation.
 - 2.1 List **two** problems (other than atrial fibrillation) that require specific treatment in this patient. (10 marks)
 - 2.2 List **five** likely underlying causes of atrial fibrillation in this patient. (20 marks)
 - 2.3 Give **five** relevant investigations that are helpful in the management of this patient. (20 marks)
 - 2.4 List **four** drugs that you would select in the management of this patient. (20 marks)
 - 2.5 List **three** complications that this patient is at risk of developing while in the hospital. (30 marks)
3. Describe briefly the **indications, preparation and complications** of
 - 3.1 renal biopsy. (50 marks)
 - 3.2 peritoneal dialysis (50 marks)

(the description of the procedure is not required)

PART C

4. A 25 year old farmer was admitted with fever and vomiting of three days duration. What features in the history of this patient, clinical examination and routine investigations would support the diagnosis of
 - 4.1 leptospirosis (35 marks)
 - 4.2 dengue haemorrhagic fever (35 marks)
 - 4.3 malaria (30 marks)

PART D

5. A 50 year old man with a five year history of type 2 diabetes mellitus presented with a fasting blood glucose of 250mg/dl (14mmol/L)
 - 5.1 List **four** possible factors for elevation of blood glucose in this patient. (30 marks)
 - 5.2 List **four** clinical parameters and **three** biochemical investigations you would check in this patient in order to screen him for complications of diabetes. (40 marks)
 - 5.3 List the important steps that you would take in the management of **one** of the microvascular complications that could be present in this patient. (30 marks)

PART E

6. A 30-year-old patient presented with high fever, headache, vomiting and left sided weakness progressing over three days. On examination Glasgow Coma Scale was 10/15 and he had neck stiffness, left hemiparesis and an extensor plantar response on left side.
- 6.1 What is the most likely diagnosis? (20 marks)
6.2 List **four** common predisposing factors for the condition you mentioned in 6.1. (30 marks)
6.3 What immediate investigation would you request to confirm the diagnosis given in 6.1? (20 marks)
6.4 What drugs would you start on this patient until the investigation results mentioned in 6.3 are available? (30 marks)

PART F

7. A 20 year old male is admitted with a three month history of fatigue and shortness of breath. The results of his investigations are as follows.
Hb 7.8g/dL MCV 93 fl. MCH 29 pg. WBC 8900 /mm³ N 62%, L 35%, M 1%, E 2%.
Platelet count 230x10⁹/L. Urine: bilirubin - absent, urobilinogen - increased.
- 7.1 What is the likely condition that could give rise to the above clinical picture? (20 marks)
7.2 Write **three** further investigations to confirm the clinical condition that is mentioned in 7.1. (30 marks)
7.3 Write **four** diseases that can give rise to the condition mentioned in 7.1. (20 marks)
7.4 Mention **one** test each with expected results to confirm each of the differential diagnoses. (30 marks)
8. A 65 year old male is admitted with a history of pain in the left knee joint of 3 days duration. On examination he is febrile. His left knee is swollen and tender with a moderate effusion.
- 8.1 Write **five** investigations that you would do in this patient to arrive at a diagnosis giving the expected results. (60 marks)
8.2 What is the most likely diagnosis? (20 marks)
8.3 Give **two** other possible diagnoses. (20 marks)

PART G

- 9.
- 9.1 What is the commonest type of dementia? (10 marks)
9.2 Outline the management of the type of dementia that you have mentioned in 9.1. (40 marks)
9.3 Describe the psychological and social problems in the elderly. (50 marks)
10. A 22 year old man was brought to hospital by his family. The patient was on tricyclic antidepressant drugs for the past three years and was functioning normally whilst on drugs. He has not gone for work for about two weeks, though he left the boarding house daily in the morning. He was found wondering about, crying and sobbing in the park he used to meet his girlfriend. It was revealed that the girlfriend had left him few weeks ago. The patient has not taken any food or drinks for three days and has not slept for several days. The patient appeared unkempt and could not recognize the doctor although he knew the doctor for three years. He was crying; blaming everybody for preventing his girlfriend meeting him, and claimed he heard the girl calling him wherever he went.
- 10.1 Mention **two** risks that you can identify in this patient. (20 marks)
10.2 Outline the immediate management. (40 marks)
10.3 Describe the intermediate and long term management of this patient. (40 marks)