



Faculty of Medicine
University of Ruhuna

Final MBBS - March 2008
Medicine Paper 1
3 March 2008, 1300-1600 hrs

Answer all TEN questions
Answer each Part in a separate book

Part A

- 1 A 40 year old carpenter sought admission to the ward as he felt chest discomfort and tiredness over the previous two days. On admission, he had a blood pressure of 76/50 mmHg, jugular venous pressure of 6cm above the sternal angle and the lungs were clear.
- 1.1 List THREE clinical conditions that would give rise to this clinical picture. (30 marks)
- 1.2 Briefly discuss the clinical features and investigations that will differentiate each one of these conditions mentioned in 1.1 from the others. (70 marks)

Part B

- 2
- 2.1 What are the symptoms and signs of hypoxia? (30 marks)
- 2.2 List FOUR methods by which oxygen can be delivered to a patient? (20 marks)
- 2.3 What device is used to monitor oxygenation in clinical practice? (10 marks)
- 2.4 What device would you use to deliver oxygen to a patient with chronic obstructive pulmonary disease? Mention the rationale for using this device. (40 marks)

Part C

- 3
- 3.1 What urinary investigations would help to find out the cause of hypertension in a 30-year-old male admitted with blood pressure of 150/100mmHg. (20 marks)
- 3.2 Indicate the expected findings in each of the test mentioned in 3.1 and discuss their clinical relevance. (80 marks)

4

- 4.1 List FIVE indications for liver biopsy? (20 marks)
- 4.2 Describe briefly the steps that should be taken as a House Officer before sending a patient for a liver biopsy? (40 marks)
- 4.3 Describe briefly the complications you would expect in the first 24 hours following a liver biopsy? (40 marks)

Part D

- 5 A 40 year old male who was diagnosed to have type 1 diabetes mellitus at the age of 15 years presented with a history of recurrent fainting attacks and early morning headache for three weeks. One month back, he has taken up a new job as a sports instructor and due to practical difficulties his insulin regime has changed to twice a day lente insulin from three times a day soluble insulin. The current glycosylated haemoglobin was 5.0% and serum creatinine 3.5mg/dl.
- 5.1 What is the most likely condition that will account for his presenting symptoms? (10 marks)
- 5.2 List FOUR likely causes for the condition you mentioned in 5.1 in this person. (40 marks)
- 5.3 Briefly discuss the issues in the management of glycaemic control in this person. (50 marks)

- 6 A 50 year old male was admitted with a five day history of fever, headache and body aches. Physical examination on admission revealed mild icterus, few petechial haemorrhages, mild hepatomegaly, pulse rate of 110 beats per minute and blood pressure 80/60 mmHg.
- 6.1 List THREE likely differential diagnoses for the observed findings in this patient. (30 marks)
- 6.2 List FIVE investigations you would request within the first 24 hours of admission to arrive at a diagnosis. (25 marks)
- 6.3 Briefly describe how the results of the investigations listed in 6.2 will help in the differential diagnosis you mentioned in 6.1. (45 marks)

Part E

- 7.1 List THREE causes of intermittent numbness in right hand and forearm of a patient. (15 marks)
- 7.2 Mention THREE clinical features each that will help to differentiate each of the conditions you mentioned in 7.1 (45 marks)
- 7.3 List ONE investigation to confirm each of the diagnosis you mentioned in 7.1 (15 marks)
- 7.4 List the steps of management of ONE of the conditions you mentioned in 7.1 (25 marks)

Part F

- 8 A 16 yr old previously healthy girl is admitted with shortness of breath on exertion. Two weeks ago, she had an episode of fever lasting for five days. On examination she is pale and mild icterus was noted. Respiratory system and cardiovascular system was normal. Abdominal examination revealed a palpable spleen of two cm below the left costal margin.

Investigations - Hb 6.5g/dl, PCV 25, WBC 10,000/mm³, platelets 200,000/mm³, urine bilirubin negative, urine urobilinogen increased, urine deposits nil.

- 8.1 What clinical condition will give rise to this clinical picture? (10 marks)
- 8.2 Give THREE aetiological causes which give rise to this clinical picture? (15 marks)
- 8.3 What further investigations would you arrange in this patient to confirm the diagnosis and confirm the aetiological cause? Give the expected results. (25 marks)
- 8.4 Outline the management of ONE of the conditions that you have mentioned in 8.2. (50 marks)

Part G

- 9 A 23 year old female working in a private bank was admitted to the psychiatric unit with one week history of altered behaviour. She has insisted the manager to let her work after hours in the absence of any need to do so. Her colleagues have noticed that she has been unusually over familiar with the customers and has been spending money excessively. Her mother mentioned that her daughter has got treatment from a psychiatrist following a breakdown of a love affair an year ago. She has refused to eat and drink and also has expressed suicidal thoughts during that episode.

On examination she was dressed in bright colours and was wearing a lot of gold jewelry. She claimed that she has been promoted as the general manager of the bank she is working and was on her way to Colombo to assume duties. She was hostile towards her parents as they have prevented her from going to Colombo. She threatened that she would leave the ward unless she is allowed to go.

- 9.1. What is the most probable diagnosis? (10 marks)
- 9.2 Give your reasons for arriving at the above diagnosis. (20marks)
- 9.3 Describe the immediate management of this patient (30 marks)
- 9.4 Describe the long term management of this patient. (40 marks)

10. An 18 year old schoolboy was brought to the psychiatry out-patient clinic by his mother. The boy has been refusing to go to school and tuition classes for the last three months fearing of contracting illnesses. He was noticed to be spending a lot of time washing his hands using antiseptic lotions. He washes his books, pens and school bag if someone touches these and he spends hours washing his clothes. The boy says that he is trying not to wash that much, but it is impossible for him to stop the urge to wash.

- 10.1 Identify the psychopathology seen in the above patient. (30 marks)
- 10.2 What is the most likely diagnosis? (20 marks)
- 10.3 How would you treat this boy? (50 marks)