



Faculty of Medicine
University of Ruhuna

Final Examination for Medical Degree – April 2006

Medicine Paper 1

24 April 2006, 1300 -1600 hrs

Answer all TEN Questions
Answer each part in a separate book

Part A

Q1 A 45 year old male with no previous history of heart disease is admitted to the hospital four hours after developing pain over the chest. He arrives at the hospital still having chest pain. He is a smoker, but has no hypertension, diabetes, hypercholesterolaemia or a family history of heart disease. His blood pressure is 140/84 mmHg, heart sounds normal and the lungs are clear. The electrocardiogram done soon after admission shows 2mm ST elevation in leads V1 to V6.

- 1.1 What is the most likely diagnosis? (10 marks)
- 1.2 What other investigation will you do to confirm the diagnosis? (10 marks)
- 1.3 Describe the management of the patient in the next 24 hours. (80 marks)

Q2

- 2.1 List the general indications for pleural aspiration. (15 marks)
- 2.2 Describe the steps that should be taken in preparation for a pleural aspiration. (the description of the procedure is not required) (30 marks)
- 2.3 Name FIVE complications of pleural aspiration. (25 marks)
- 2.4 Write out the instructions to the nurse who will monitor the patient after the procedure. (30 marks)

Part B

Q 3 A 45 year old woman presented to medical clinic with tingling sensation of fingers of two years duration. She also complained of several episodes of muscle cramps involving fingers during this illness. The patient had undergone total thyroidectomy two years ago and was on thyroxin 300 micrograms daily.

Full blood count, thyroid hormone profile, blood glucose and serum creatinine were normal.

- 3.1 What abnormality would explain her symptoms? (20 marks)
- 3.2 What is the most likely underlying cause of this abnormality? (20 marks)
- 3.3 How would you confirm the condition you mentioned in 3.2? (20 marks)
- 3.4 How would you treat this condition? (20 marks)
- 3.5 Apart from the ones mentioned in the question, name two other probable manifestations of this condition. (20 marks)

Q 4 A previously well, 30 year old woman presented with jaundice of one month duration. She was found to have mucosal pallor and mild splenomegaly. There was no ankle oedema or ascites.

- 4.1 List THREE differential diagnoses which could explain the clinical features. (30 marks)
- 4.2 Discuss briefly the investigations, procedures and expected results that would help in confirming the diagnosis in each of the conditions you mentioned in 4.1. (70 marks)

MCQs

Part C

Q5 A 35 year old female presents with generalized oedema of one weeks duration. Physical examination reveals a blood pressure of 120/80 mmHg with no evidence of heart failure. Preliminary investigations reveals haemoglobin concentration at 13g/dL, blood urea of 25 mg/dL and urinalysis showing proteins ++++ with normal deposit.

Medicine Final

- 5.1 What is the most likely diagnosis? (20 marks)
- 5.2 List TWO biochemical investigations that would support the diagnosis mentioned in 5.1. (30 marks)
- 5.3 List FIVE therapeutic measures you would recommend to relieve generalized oedema in this patient. Describe the mode of action in each of them. (50 marks)

Q6 Briefly describe the therapeutic basis of each of the following procedures.

- 6.1 Antibiotic prophylaxis prior to dental extraction for a patient with chronic rheumatic mitral regurgitation. (30 marks)
- 6.2 Infusion of volume expanders for a patient with dengue shock syndrome. (35 marks)
- 6.3 Treatment with diethylcarbamazine (DEC) for a patient with tropical pulmonary oesinophilia. (35 marks)

Part D

Q7 A 65 year old woman is admitted with a history of sudden-onset left hemiparesis.

- 7.1 List FIVE physical signs (other than those in the nervous system) that you will look out for, which are of aetiological value. (30 marks)
- 7.2 List FIVE investigations that you would request in this patient indicating the expected results. (70 marks)

Part E

Q8 A 15 year old boy presented with a painful swelling of his right knee joint after returning from school. The joint aspirate was uniformly blood stained.

- 8.1 What further information would you seek from this boy's history? (40 marks)
- 8.2 List the investigations (give the expected results) you would perform / request to arrive at a diagnosis? (60 marks)

Part F

Q9 A 60 year old man was brought to the Psychiatry Unit by his sons. Family members have noted that the patient was talking too much, spending money unnecessarily and not sleeping at night over the past two weeks. During the interview, the patient stated that he is sure to win the local government election to be held shortly. He is angry with and hostile towards his family members for preventing him contesting at the election. The patient denied having any illness and offered to build a spacious and modern psychiatry ward for the Teaching Hospital, Karapitlya.

- 9.1 What is the most likely diagnosis? (10 marks)
- 9.2 How would you manage this patient on the first day of admission? (40 marks)
- 9.3 List TWO specific drugs which can be used in this condition stating the dose and route of administration. (10 marks)
- 9.4 State TWO important and common side effects of each drug you have mentioned in 9.3 (20 marks)
- 9.5 Describe the management of the side effects you have mentioned in 9.4. (20 marks)

Q10

- 10.1 Enumerate the signs and symptoms of panic disorder. (40 marks)
- 10.2 Discuss the differential diagnosis and treatment of panic disorder. (60 marks)