



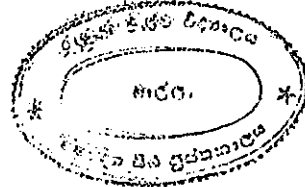
Faculty of Medicine
University of Ruhuna

Final Examination for Medical Degree - November 2005

Medicine Paper 1

24 November 2005, 0900 -1200 hrs

Answer all TEN Questions
Answer each part in a separate book



Part A

Q1

A 65 year old man was admitted to hospital due to worsening dyspnoea. He has been short of breath with exertion for several years. He has been smoking 8-10 cigarettes for the past 20 years but had stopped 6 months back. There is no past history of rheumatic fever, hypertension or diabetes.

On examination, the pulse was 90 beats per minute, blood pressure 110/70 mmHg, jugular veins 6 cm above sternal angle, apex not palpable, grade III/VI systolic murmur heard at the left lower sternal edge which increased with inspiration with a loud pulmonary second sound. On auscultation of the chest, the breath sounds were reduced with few bilateral rhonchi. There was pitting oedema of the feet.

- 1.1 What is the most likely diagnosis? (20 marks)
- 1.2 Give one other possibility. (10 marks)
- 1.3 List FOUR investigations that would help confirm the diagnosis mentioned in 1.1. State the expected findings. (60 marks)
- 1.4 What is the cause of the murmur that is heard in this patient? (10 marks)

Q2

A 55 year old man admitted with loss of appetite and loss of weight was found to have a moderate right sided pleural effusion.

- 2.1 List THREE likely conditions for the pleural effusion seen in this man. (30 marks)
- 2.2 How will the physical examination of this man distinguish one condition from the other? (70 marks)

Part B

Q3

A 56 year old trader with cirrhosis of the liver was admitted with haematemesis of two days duration.

- 3.1 List FOUR probable causes for the haematemesis. (20 marks)
- 3.2 What features in the history, examination and investigations would indicate decompensation of his liver functions? (50 marks)
- 3.3 List FOUR probable causes for acute decompensation of liver functions in this patient. (30 marks)

Q4

- 4.1 List FOUR clinical features of hypercalcaemia. (30 marks)
- 4.2 List FOUR causes of hypercalcaemia. (20 marks)
- 4.3 Explain what special steps are taken when drawing blood for the estimation of serum calcium level? (20 marks)
- 4.4 List FOUR therapeutic actions that can reduce serum calcium level in a patient with severe hypercalcaemia. (30 marks)

Part C

Q5

A 25 year old female presented with fever of five days. On examination, she had mild icterus, diffuse petechial haemorrhages, a pulse rate of 100 beats per minute and blood pressure of 90/60 mmHg.

- 5.1 List THREE possible conditions that you suspect in this patient. (20 marks)
- 5.2 List FOUR investigations useful in the management of this patient within the first 24 hours of admission and indicate the expected result of each of the tests. (50 marks)
- 5.3 Briefly describe the steps in the investigation and treatment of any ONE of the conditions you mentioned in 5.1. (30 marks)

Q 6

Briefly describe the steps in the investigation and treatment of the following patients:

- 6.1 An 18 year old previously healthy girl, presents with facial and ankle swelling, reduced urine output and breathlessness of four days duration. She was found to have a jugular venous pressure of 5 cm and blood pressure of 170/110 mmHg. Examination of urine revealed trace of albumin with red cell casts.
- 6.1.1. What is the most likely diagnosis? (10 marks)
 6.1.2. Briefly describe the steps in the investigation and treatment. (40 marks)
- 6.2 A 65 year old male with a history of hypertension for 15 years presents with anorexia, tiredness and backache. Physical examination reveals pallor, bilateral pitting ankle oedema and a blood pressure of 180/110 mmHg. He was found to have albuminuria and a creatinine clearance of 10ml/min.
- 6.2.1. What is the most likely diagnosis? (10 marks)
 6.2.2. Briefly describe the steps in the investigation and treatment. (40 marks)

Part D**Q 7**

- 7.1 List FIVE common clinical features of idiopathic Parkinson's disease. (30 marks)
- 7.2 List THREE differential diagnoses for idiopathic Parkinson's disease. (20 marks)
- 7.3 Explain briefly the pharmacological basis of the action of co-careldopa in idiopathic Parkinson's disease. (50 marks)

Part E**Q 8**

A 17 year old girl presents with breathlessness on exertion and lethargy. She gives a history of menorrhagia for the past three months. Clinical examination reveals mucosal pallor and a few petechial haemorrhages over the chest and limbs. The rest of the examination is normal.

The following investigations were done:

Haemoglobin - 9.8 g/dl, white blood cell count - 8800 (neutrophils 68%, lymphocytes 30%, eosinophils 1%, monocytes 1%), platelet count 30,000 mm³

- 8.1 Give TWO haematological abnormalities present in this patient? (10 marks)
 8.2 What is the most likely diagnosis? (10 marks)
 8.3 Write FOUR other investigations that you would arrange to support the diagnosis giving the expected findings. (40 marks)
 8.4 Briefly discuss the management of this patient. (40 marks)

Part F**Q 9**

A 50 year old fisherman was admitted to the Psychiatry Unit, Teaching Hospital Karapitiya with a history of hiding inside the house for two days claiming there are people coming to kill him. In the ward he was noticed to be agitated and frightened of the "snakes" and the "big dog" he claimed to be approaching his bed.

- 9.1 State three important questions you ask from this patient and his informants to arrive at a diagnosis and to plan the management. (30 marks)
 9.2 What is the most likely diagnosis? (10 marks)
 9.3 How would you manage this patient on first three days after admission? (30 marks)
 9.4 Discuss the important aspects in the management of this patient after discharge from the ward. (30 marks)

Q 10

A 75 year old man was brought to the psychiatry clinic by his family because of the patient's gradually deteriorating memory. He was suspected to have early dementia.

- 10.1 Give one other diagnosis you consider in this patient. (10 marks)
 10.2 State FIVE features you may find in the condition you mention in 10.1 (25 marks)
 10.3 Discuss the management of dementia (Alzheimer's type). (65 marks)