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**Faculty of Medicine
University of Ruhuna**



Final Examination for Medical Degrees – February 2003

Medicine Paper I

27th February 2003, 0900 – 1200 hrs.

**Answer all TEN questions.
Answer each part in a separate book.**

PART A

1. A 60 year old man was found to have a blood pressure of 200/100mm of Hg on several occasions over a period of two weeks. He gave a past history of wheezing. He smoked five cigarettes a day and consumed alcohol occasionally. His body mass index was 30 kg/m².
 - 1.1 Give four biochemical blood tests that you would perform, giving reasons. (30 marks)
 - 1.2 Describe briefly non-pharmacological measures that you would recommend in the management. (40 marks)
 - 1.3 List three most appropriate anti-hypertensive agents that you would use in this patient. (30 marks)

2. A 50 year old man who is otherwise normal presented with a dry cough of two months duration.
 - 2.1 Give five conditions that can cause his illness. (25 marks)
 - 2.2 List the clinical findings and investigations that would support the diagnosis of conditions that you have mentioned. (75 marks)

PART B

- 3 A general practitioner referred a 40 year old male with malaise. Investigations showed the following results.

ESR	12 mm/hr	
Haemoglobin	11 g/dl	
WBC	9800/mm ³	
	N 65% L 30% E 5%	
Platelet count	180,000/mm ³	
Serum bilirubin	14	(3-17 μmol/l)
Serum aspartate transaminase	68	(11-55 iu/l)
Serum alanine transaminase	64	(11-55 iu/l)
Serum alkaline phosphatase	260	(11-280 μmol)
Serum protein	68 g/l	(60-83 g/l)
Serum albumin	26 g/l	(35-53g/l)
Prothrombin time	15 seconds	Control 11 seconds

- 3.1 What is the most likely condition in this patient? (30 marks)
 - 3.2 Name two further investigations that will support or confirm the answer in 3.1 stating the expected findings. (20 marks)
 - 3.3 List five probable aetiological causes of the condition mentioned in 3.1 indicating the appropriate confirmatory laboratory investigation/s. (50 marks)
4.
 - 4.1 Describe the chemoprophylaxis for a traveler to a malarial endemic area. (50 marks)
 - 4.2 Describe the management of a 16 year old male with Grade III dengue haemorrhagic fever with a platelet count of 10,000 /mm³ and a haematocrit of 55%. (50 marks)

5. A 55 year old trader was admitted with weight loss, lethargy and weakness of the body for one month duration. The initial blood count showed the following results.
Haemoglobin 8g/dl, white cell count 2,500/mm³ and platelet count 90,000/mm³

5.1 List four possible causes for his illness. (30 marks)

5.2 What information in the history and physical examination would support the causes mentioned in 5.1? (70 marks)

6. A 40 year old farmer presented with fever, myalgia and reduced urine output of one weeks duration. Examination revealed subconjunctival haemorrhages and muscle tenderness. Investigations revealed the following results.
Haemoglobin 10g/dl, white cell count 15,000/mm³ with 80% neutrophils, platelet count 250,000/mm³, blood urea 150mg/dl, serum sodium 150mmol/L and serum potassium 6.5mmol/L.

6.1 What is the most likely diagnosis? (10 marks)

6.2 Which abnormal finding, needs immediate attention in the management of this patient? (20 marks)

6.3 List three possible ways to treat the abnormality that you have mentioned in 6.2. (30 marks)

6.4 What clinical parameters would you monitor and what laboratory investigations would you do to detect complications and determine the progress of this patient? (40 marks)

PART D

7. A 50 year old man presented with abdominal pain and vomiting of three days duration. On examination he was febrile, dehydrated, dyspnoeic and had a pulse rate of 100 beats per minute and a blood pressure of 110/70mm of Hg. Examination of his urine revealed a brick red precipitate for reducing substances and a strongly positive Rothera's test.

7.1 What is the most likely diagnosis? (15 marks)

7.2 List five investigations useful for the immediate management of this patient. (25 marks)

7.3 Briefly describe the important therapeutic steps in the management of this patient within the first 24 hours. (60 marks)

PART E

8. A 35 year old man is transferred from General Hospital, Hambantota to Teaching Hospital, Karapitiya with a history of headache, fever, drowsiness and fits of three days duration.

8.1 Give three differential diagnoses. (15 marks)

8.2 Give one investigation each to confirm your differential diagnosis indicating expected findings. (60 marks)

8.3 Discuss the specific management of one of the conditions you mentioned in 8.1. (25 marks)

PART F

9. A young woman comes to a primary care center and talks to the medical officer about the bad character of her husband. She says that her husband has many mistresses. She has seen him talking to women alone at his workplace. He looks at women on the road in an odd way. She is sure that he sends some message for them to come to him at night. She is also certain that he has sex with his mother and four sisters. She wants the doctor to advise the husband to stop this bad behaviour.

9.1 What is the most likely condition here? (30 marks)

9.2 Describe how you would handle this situation. (40 marks)

9.3 Describe briefly the psychiatric treatment of this condition. (30 marks)

10. Using psychotherapy only, how would you manage the following patients admitted to the Psychiatry Unit?

10.1 A school boy who passed the GCE 'O' level examination with distinctions in every subject, but scared of sitting for the GCE 'A' level examination next month. (35 marks)

10.2 A housewife who spends most of her time washing her hands repeatedly. (35 marks)

10.3 A young female unmarried garment factory worker who was raped the week before. (30 marks)