



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
FINAL EXAMINATION FOR MEDICAL DEGREE - 1 SEPTEMBER 2009
MEDICINE PAPER 1 - 3 HOURS

Answer all 10 questions

Answer each part in a separate answer book

Part A

1. A 60 year old male is admitted with chest pain in the lower sternal area, sweating and faintishness of 10 hours duration. He has been discharged from hospital two weeks ago following treatment with streptokinase for an acute anterior myocardial infraction.
On examination, he is in pain with a pulse rate of 120 beats per min. and blood pressure of 80/60 mm Hg.
 - 1.1 List 3 possible causes for this presentation. (30 marks)
 - 1.2 State briefly, how you would differentiate the three conditions you mentioned in 1.1 with the help of history, physical examination and investigations. (70 marks)

2. A 45 year old male presented with two weeks history of fever, cough and several episodes of hemoptysis.
 - 2.1 List three differential diagnoses. (30 marks)
 - 2.2 Give four features in the history and four physical signs you would elicit in this patient and briefly describe their value in differentiating the conditions you mentioned in 2.1. (40 marks)
 - 2.3 List one investigation, which is of diagnostic value for each of the conditions you mentioned in 2.1. (30 marks)

Part B

3.
 - 3.1 List four emergency clinical conditions for which insulin therapy is indicated. (20 marks)
 - 3.2 State the route and mode of insulin administration in each of the instances mentioned in 3.1. (10 marks)
 - 3.3 List five causes of hypoglycemia in adults. (20 marks)
 - 3.4 Discuss briefly the immediate management of hypoglycemic coma. (50 marks)

4. Discuss briefly the pathogenesis of the following conditions.
 - 4.1 Jaundice in malaria. (40 marks)
 - 4.2 Ascites in tuberculosis (30 marks)
 - 4.3 Portal hypertension in cirrhosis. (30 marks)

5. A 35 year old married woman was brought to hospital with a history of passing only small amounts of red colour urine since her ring finger was bitten by a snake on the previous day. She was found to have a gangrenous finger.
 - 5.1 Give a simple measure that could have prevented her finger from developing gangrene. (10 marks)
 - 5.2 Give two likely explanations for passing red urine. (20 marks)
 - 5.3 Give three mechanisms, which may have led to reduction of urine output. (45 marks)
 - 5.4 Give one specific measure, which may have prevented her systemic manifestations. (10 marks)
 - 5.5 What type of snake is likely to be responsible for this scenario? (15 marks)

Part C

6. A 35 year old female is admitted with numbness and weakness of all four limbs developing over three days. On examination, she has bilateral facial nerve palsy and her tendon reflexes were absent.
- 6.1 What is the most likely diagnosis? (10 marks)
- 6.2 List two investigations that would confirm the diagnosis. (20 marks)
- 6.3 Briefly discuss the management of this patient. (70 marks)
7. A 55 year old male presented with recent onset of fatigue. On examination, he was pale and firm spleen was felt two cm below the costal margin.
- Investigations were as follows.
- Hemoglobin – 7 g/dL, WBC $6 \times 10^9/L$ (N- 70%, L – 25 %, E – 5%)
Serum bilirubin – (total) 2 mg / dL
- 7.1 Give four differential diagnoses. (40 marks)
- 7.2 Give six further investigations you would arrange to arrive at a diagnosis, giving expected results in each of the conditions mentioned in 7.1. (60 marks)
8. A 78 year old lady is admitted to hospital complaining malaise, fatigue and weight gain. She has a past history of bilateral osteoarthritis affecting both knee joints for which she has been taking diclofenac sodium and paracetamol over the past five years.

Her blood pressure is 180/100 mmHg and following investigations were available on admission.

Hemoglobin- 8.6 g /d/L Blood picture- normocytic normochromic anemia

WBC, $8800 / \text{mm}^3$ (N 62%, L- 37 %, E- 1%), ESR – 32 mm 1^{st} hour, Urine ward test – proteins ++

- 8.1 What is the most likely diagnosis? (10 marks)
- 8.2 List two investigations to confirm the diagnosis you mentioned in 8.1 (20 marks)
- 8.3 List four investigations to look for any complications of the condition you mention in 8.1 and mention the expected result in each investigation. (40 marks)
- 8.4 List four steps in the management of this patient explaining the reasons. (30 marks)

Part D

9. A 35 year old female was referred to psychiatry clinic by a cardiologist. She has had five hospital admissions with chest pains over the last six weeks. All the cardiac and pulmonary investigations have been normal.
- 9.1 Give two leading questions you would ask from this patient to arrive at a diagnosis. (40 marks)
- 9.2 What is the likely diagnosis? (10 marks)
- 9.3 Describe the management of this patient. (50 marks)
10. A 40 year old female was brought to psychiatry clinic after an attempt to commit suicide. Patient claimed that her body is going to perish and emanate a bad smell while alive. She also said that what she drinks is directly excreted as urine as there are no internal organs. Her husband revealed that patient has been crying most of the time and neglecting her day-to-day activities over the last one month.
- 10.1 What is the diagnosis? (10 marks)
- 10.2 Support your diagnosis giving evidence from the history. (10 marks)
- 10.3 Mention 5 other signs or symptoms you would expect to see in this patient. (20 marks)
- 10.4 Describe
- 10.4.1 immediate management. (20 marks)
- 10.4.2 long term management of this patient. (40 marks)