

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - NOVEMBER 2012**  
**MEDICINE PAPER II**

**DATE: 05/11/2012**  
**TIME: 3 HOURS**

**ANSWER ALL TEN QUESTIONS.**  
**ANSWER EACH QUESTION IN A SEPARATE BOOK.**

- 01 A 13 –year- old boy was admitted to the medical ward with a history of swelling of his left ankle and right knee joint of 3 days duration. He also complained of fever. Ten (10) days prior to admission he had sore throat for which he did not take any treatment.
- 1.1 What further information from the history will help to make a diagnosis? (20 marks)
- 1.2 List the investigations that you will request for this patient. (20 marks)
- 1.3 Outline the immediate management of this patient. (20 marks)
- 1.4 A week after admission he developed palpitations and shortness of breath. What is the likely complication he has at present? (10 marks)
- 1.5 How will you manage this complication? (10 marks)
- 1.6 Brief out the long term management of this patient. (20 marks)
- 02 An 18–year-old student has been showing a gradual deterioration in academic performance. After doing very well in his ‘O’ level exams, he is now showing no interest in his studies. He is withdrawn and isolative. At times his parents have found him talking to himself and giggling for no apparent reason. When asked, he would say he could hear people talking.
- 2.1 What is the possible diagnosis? (10 marks)
- 2.2 What findings in his mental state examination would help you confirm the diagnosis? (40 marks)
- 2.3 How would you manage him? (50 marks)

03 A 58-year-old man presented to the medical clinic with a history of painful joints affecting both hands for the last 8 months. He has been using paracetamol and ibuprofen initially with good effect. He now complains of worsening symptoms despite regular use of these analgesic medications.

3.1 What salient points you will clarify under history of presenting complaint? (30 marks)

3.2 Name 3 important differential diagnoses for the above presentation. (20 marks)

3.3 What are the physical signs you will look for on examining the hands of this patient? (30 marks)

3.4 Name 5 important blood investigations you will request on this patient. (20 marks)  
Give reasons

04 A 52-year-old ethanol abuser admitted to the medical emergency with haematemesis and melaena of one day duration. He has received medications from the general practitioner for bilateral knee pain a week ago. He also admitted that he had meal related abdominal pain for the last 6 months. On examination he was pale and had a pulse rate of 110 per minute and blood pressure of 80/60 mm Hg

4.1 Briefly outline the initial management of this patient. (30 marks)

4.2 Name 3 possible causes for his presentation. (15 marks)

4.3 What are the important physical signs you would look for to differentiate the causes you mentioned in 4.2? (20 marks)

4.4 On the day after admission he had developed confusion and restlessness. A diagnosis of Delirium Tremens (DT) was made.

4.4.1 What do you understand by the term delirium tremens (DT)? (15 marks)

4.4.2 How do you manage Delirium Tremens in medical ward? (20 marks)

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- 5.1 Enumerate the causes of hyper and hypothyroidism? (20 marks)
- 5.2 Mention the investigations and the relevant *precautions* you would do in the diagnosis of pheochromocytoma? (40 marks)
- 5.3 5.3.1 What are the different causes of hyperprolactinaemia? (20 marks)
- 5.3.2 How will you investigate hyperprolactinemia? (20 Marks)
- 06 A 14 –year- old school boy presented with fever, severe anorexia, nausea, jaundice and tender hepatomegaly. Results of his blood test were as follows:  
 Serum bilirubin – 7 mg/dl  
 Serum alanine transferase – 2500 IU/L  
 Serum alkaline phosphatase – 120 IU/L  
 Hb – 12g/dl  
 WBC – 5000/ $\mu$ l  
 Platelet count – 200,000/  $\mu$ l
- 6.1 What is the most likely diagnosis? (10 marks)
- 6.2 What test would you do to confirm the above diagnosis? (10 marks)
- The next morning, he was found to be confused and to have flapping tremors.
- 6.3 Outline the management of this complications (50 marks)
- 6.4 As the house officer, what preventive measures will you take to prevent the spread of the condition you mentioned in 6.1 (30 marks)
- 07 A 30–year- old male with bronchial asthma has presented to accident and emergency unit 6 times with acute worsening of wheeze during the past 6 months. He is married and having 3 children and working as a carpenter for the last eight months. He started to smoke beedi since the time he was working as mason from the age of 18 years. He is on following medications.
1. Metered dose of fluticazone 500  $\mu$ g and salmeterol 50  $\mu$ g combination inhaler twice daily
  2. Theophylline slow release tablets 200 mg at night.
- 7.1 Write 5 possible reasons for his poor control of asthma. (15 marks)

- 7.2 What are the other different groups of pharmacological agents that could be used to control his disease? (10 mark)
- 7.3 Write 2 side effects of each of these four different group of drugs? (15 marks)
- During the last admission he complained of sudden worsening of difficulty in breathing after a spasm of cough. On examination. His left sided breath sounds were diminished markedly with diffuse ronchi in other areas.
- 7.4 What could be the reason for his worsening of shortness of breath? (10 marks)
- 7.5 How will you manage the condition you have mentioned 7.4? (50 marks)
08. A 60 –year- old Hindu Temple priest from an extended family has presented with history of progressive shortness of breath and palpitation on exertion for last three months. He had surgery for an abdominal malignancy at the age of 56 years. On examination he was found to be pale, BMI of 24, pulse – 86/minute; BP – 130/90 mm Hg; Heart sounds dual rhythm with a flow murmur. His spleen was palpable at the level of umbilicus. He had a Hb report of 5g/dl
- 8.1 Write 5 possible causes for his anaemia. (15 marks)
- 8.2 What other examination findings that helps you to find the cause of his anaemia. (15 marks)
- 8.3 List down the investigations you will order with the expected abnormalities that could be seen in these investigations. (30 marks)
- 8.4 Brief out the management of this patient. (40 marks)
- 9 A patient with polycystic kidney disease is admitted feeling unwell following an acute illness.
- His serum creatinine is 3.4mg/dl. A routine blood check 2 weeks ago had shown serum creatinine of 1.8mg/dl.
- 9.1 What are the reasons you would consider for his recent rise of creatinine? (20 marks)

- 9.2 Discuss the management of this patient in broad outline if his serum creatinine stabilizes at 1.9mg/dl(Normal:<1.5mg/dl) after management of acute illness? (80 marks)
- 10 A 23-year-male has found that his legs have become weak to a point where he could not get up and walk over period of 72 hours.  
On examination he could not raise his arms above shoulders or rise from a seated position. His reflexes were absent, eye movements were preserved and there was no objective sensory loss.
- 10.1 What is the working diagnosis neurologically? (15 marks)
- 10.2 What urgent biochemical test is indicated to exclude an important differential diagnosis? (15 marks)
- 10.3 What further confirmatory tests are needed from a neurology point of view? (30 marks)
- 10.4 How will you assess his respiratory function? (20 marks)
- 10.5 List two evidence based modalities of treatment? (20 marks)