

UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES(1ST) – NOVEMBER 2016

MEDICINE PAPER II



DATE: 21.11.2016

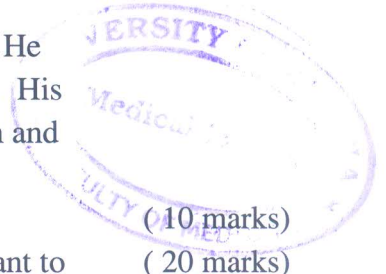
TIME: 3 HOURS

Answer all TEN (10) questions

Answer each question in separate answer book.

- 01 A 38 year old man presented with history of palpitation. Examination revealed irregularly irregular pulse with the rate 96/minute.
- 1.1 Write 3 rhythm abnormalities that could cause irregularly irregular pulse? (10 marks)
- 1.2 What information in the history that helps you to identify the aetiological causes of this patient's rhythm abnormality? (25 marks)
- 1.3 What are the factors that need to be assessed to decide on the long term treatment modality of this patient's most likely rhythm abnormality? (25 marks)
- 1.4 If this patient develops acute onset of pain and weakness of right lower limb, what could be the most likely cause for this pain and weakness? (10 marks)
- 1.5 How will you confirm the diagnosis of 1.4? (10 marks)
- 1.6 How will you treat this condition mentioned in 1.4 if confirmed? (20 marks)
- 02 An 18 year-old female patient was admitted to the emergency unit of the Teaching hospital with a history of sudden onset of weakness of her right arm and leg.
- 2.1 List 2 clinical conditions that have to be considered in the differential diagnosis. (10 marks)
- 2.2 What questions will you ask her that would help you to differentiate the conditions you mentioned in 2.1 (20 marks)
- 2.3 What abnormalities do you expect in the examination which would help to find the cause for diagnosis? (20 marks)
- 2.4 List the investigations that should be performed? (20 marks)
- 2.5 What is the immediate management? (20 marks)
- 2.6 How will you explain to the mother of this girl the future management if she continues to have weakness of the right side? (10 marks)

03. A 70 year old smoker with diabetes presented to the medical ward with a history of fever of one week duration and shortness of breath of 3 days duration. On examination his respiratory rate was 30/minute and SPO₂ was 88% on air. Stony dullness noted over the right lower hemi chest.
- 3.1 Name 3 possible causes for the above clinical presentation. (30 marks)
- 3.2 Name 3 further physical signs you would look for to narrow down your differential diagnoses. (15 marks)
- 3.3 What investigations you would perform in this patient, Give reasons. (20 marks)
- 3.4 A diagnostic thoracentesis was performed on admission. As a house officer enumerate what further analysis you would request from this sample? (15 marks)
- 3.5 How will you differentiate a transudative and exudative pleural effusion? (20 marks)
04. A 26 year old female came to medical clinic for further evaluation of high blood pressure. She was concerned about recent weight gain and tiredness for the last 6 months.
On examination, her weight was 90kg; her height was 150 cm, BP 160/100 mmHg on both arms. The medical officer noticed pigmented stretch marks on her upper arm and lower abdomen. Her fasting blood glucose was 110 mg/dl.
- 4.1 What are the 3 important clinical problems you could identify from the above information? (15 marks)
- 4.2 Name 3 possible causes for her elevated blood pressure. (30 marks)
- 4.3 What is the unifying probable diagnosis for the above mentioned clinical presentation? How will you confirm it? (20 marks)
- 4.4 Mention 5 investigations you would arrange in regard to evaluate her high blood pressure.(Give reasons) (15 marks)
- 4.5 What specific information you would expect from the Ultra sound scan abdomen? (20 marks)



05. A 55 year old patient has chronic kidney disease and hypertension. He complains of right ankle joint pain and swelling of 1 week duration. His basic investigations are Hb 9.4 g/dl; WBC 12000/mm³; ESR 40 mm and serum creatinine 2.8 mg/dl
- 5.1 What is the most likely diagnosis? Give two differential diagnoses. (10 marks)
- 5.2 What are the physical signs you would look for in this patient relevant to the acute presentation? (20 marks)
- 5.3 Mention three factors which may have precipitated above condition? (30 marks)
- 5.4 How will you confirm your diagnosis? (20 marks)
- 5.5 How do you treat the condition mentioned in 5.1 (20marks)
06. A 65 year-old male presented with progressive abdominal distension and leg swelling of two weeks duration. He is a non smoker and non alcoholic, having moderate ascites and bilateral pitting oedema up to knee level.
- 6.1 What are the possible organs failure you would consider in this patient? (15 marks)
- 6.2 Mention 5 important information you would ask in the history to find an aetiological cause for the most possible organ failure?. (20 marks)
- 6.3 What 5 important investigations you would arrange to find out the aetiology for this presentation? ²⁵ (20 marks)
- 6.4 If this patient develops distress and pain due to increased abdominal distension, How will you manage this patient? ⁴⁰ (30 marks)
- 7.1 A 45 year-old female presented with letharginess and exertional tiredness. A full blood count done on admission revealed Hb 7.0 g/dl; MCV 61fl ; WBC 9800/mm³ N-60, L-30, Platelet 355000/mm³. (20 marks)
- 7.1.1 What is the type of anaemia she is suffering from? (10 marks)
- 7.1.2 Name two causes for the anaemia you mentioned above? (10 marks)
- 7.1.3 What salient points in the history you would ask her? (20 marks)
- 7.2 A 30 year-old female with sero positive rheumatoid arthritis on disease modifying drugs presented with exertional tiredness and palpitations. On examination she was pale and a 3 finger breath splenomegaly was noted. Her Full Blood Count showed Hb 8.0 g/dl; MCV 80fl ; WBC 2800/mm³ N-45, L-40, Platelet 110,000/mm³
- 7.2.1 What is the abnormality shown in the Full blood count? (10 marks)
- 7.2.2 Name two possible causes for the above presentation in this patient? (20 marks)

- 7.3 A 25 year-old previously healthy female presented with fever, cough, arthralgia, myalgia and loose stools. On examination she was pale and mildly icteric. A full blood count showed Hb 8g/dl; MCV 96fl; platelet 120,000/mm³; WBC 6500, N-65, L-30.
- 7.3.1 What is the possible cause for her anaemia? (10 marks)
- 7.3.2 What blood tests you would request to confirm the type of anaemia you suspect? (20 marks)
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08. A 40 year old farmer is brought to the medical casualty ward with a history of unknown poisoning. His GCS on admission was 6 and there was no evidence of head injury. His pupils were pin point. Full of frothy secretion noted inside the oral cavity. Cardio-vascular assessment revealed a pulse rate of 30 bpm and BP was 70/50 mmHg.
- 8.1 What is the most likely diagnosis? (10 marks)
- 8.2 List other four physical signs you look for to support your above diagnosis? (20 marks)
- 8.3 What 5 tests will you perform and Give reasons (15 marks)
- 8.4 Outline the initial management of this patient. (25 marks)
- After initial recovery, if he developed fever, tachycardia and confusion.
- 8.5 List two possible causes for above condition (10 marks)
- 8.6 List two other physical signs that will be useful to differentiate both. (10 marks)
- 8.7 Write a sample referral letter to mental health team as a part of evaluation of this patient if you are a medical officer. (10marks)

09. A 56 year-old male on a background of type 2 diabetes mellitus, hypertension was referred by his general practitioner for further evaluation of nephrotic syndrome secondary to possible diabetic nephropathy. On arrival to medical ward, his BP was 170/100 mmHg and bilateral leg oedema was noted. Urine test (ward) shows albumin ++++ and his random blood glucose was 360 mg/dl.
- 9.1 List the medical problems he is having? (15 marks)
- 9.2 What further investigations you will perform to confirm the diagnosis of nephrotic syndrome? (15 marks)
- 9.3 What physical sign you will look for to support the diagnosis of nephrotic syndrome secondary to diabetes mellitus? (05 marks)
- 9.4 List other 5 conditions that can cause nephrotic syndrome. (15 marks)
- 9.5 If urine full report shows field full of RBCs in addition to proteinuria, list 4 possible causes you would consider. (20 marks)
- 9.6 Outline the management of this patient while he is in the ward. (30 marks)
10. A 26 year old male presented with fever for 14 days. On examination he had bilateral cervical lymph node enlargement.
- 10.1 Write 5 differential diagnoses for the above presentation. (15 marks)
- 10.2 Write 4 important other examination findings that would give you a clue for the diagnosis (mention how it could help). (10 marks)
- 10.3 List the blood investigations that would help you to make a diagnosis. Mention how it would helps in arriving at the diagnosis? (20 marks)
- 10.4 If the diagnosis was not possible with blood investigations what further investigations that would help to make an aetiological diagnosis? (Mention how it would helps in the diagnosis?) (20 marks)
- 10.5.1 If this patient reveals a history of been resident at a refugee camp; had significant weight loss and night sweats, what is the most likely diagnosis you would consider? (05 marks)
- 10.5.2 If that diagnosis was confirmed with investigations, write the management of this patient. (30 marks)