



UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREE – NOVEMBER 2019

MEDICINE PAPER II

DATE: 25.11.2019

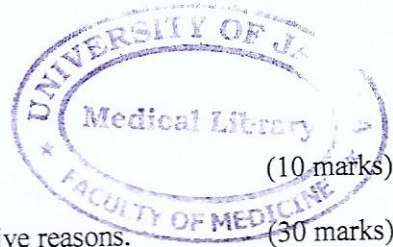
TIME: 3 HOURS

Answer All TEN (10) Questions.

Answer each question in separate answer book.

- 01.
- 1.1 A 20 year-old boy presented with weight loss, polyuria and polydypsia of four weeks. On examination BMI is 19.
- 1.1.1 Write 2 endocrine causes for this presentation. (10 marks)
- 1.1.2 List the investigations with reason that will be helpful to arrive at a diagnosis mentioned in 1.1.1. (30 marks)
- 1.2 A 40-year-old female presented with weight gain and letharginess. Her BMI is 32, pulse 52 bpm, BP 130/100 mmHg.
- 1.2.1 What is the most likely diagnosis? (10 marks)
- 1.2.2 What is the diagnostic test? (10 marks)
- 1.2.3 Discuss the treatment of this patient. (40 marks)
- 02 A 36 –year-old female with a past history of Rheumatic severe mitral stenosis presented with palpitation. On examination she had irregularly irregular pulse at a rate of 110bpm.
- 2.1 Write 2 possible rhythm disorders for her irregularly irregular pulse. (10 marks)
- 2.2 List 5 examination findings you would expect on auscultation over the precordium. (15 marks)
- If this patient develops acute onset of pain and weakness of right lower limb while in the ward.
- 2.3 What is the most likely complication he has developed? (10 marks)
- 2.4 List 3 physical examination findings to support your diagnosis. (15 marks)
- 2.5 Discuss the management of this patient's rhythm problem. (50 marks)

03. A 40-year-old man with past history of Diabetes Mellitus for 2 years presented with weak right upper limb, face and leg lasted for 30 minutes one hour ago. On admission to ETU there was no demonstrable weakness. BP was 160/90 mm Hg.
- 3.1 What is the most likely diagnosis? (10 marks)
- 3.2 Write 2 differential diagnoses. (10 marks)
- 3.3 Write other abnormal important physical examination findings you will look for in this patient to find the aetiology of the diagnosis mentioned in 3.1. (20 marks)
- 3.4 List the investigations with reason, that should be done in this patient. (30 marks)
- 3.5 Write the pharmacological treatment for the diagnosis mentioned in 3.1. (30 marks)
04. A 60-year-old non smoker who worked as carpenter for 35 years presented with progressive effort intolerance and non productive cough of 6 months. He has clubbing, Respiration rate is at rest 20/minute, respiratory system examination reveals crackles over both lung bases.
- 4.1 What is the most likely diagnosis? (10 marks)
- 4.2 Write 4 possible aetiological causes for the above diagnosis. (20 marks)
- 4.3 List the investigation needed for the evaluation of this patient (30 marks)
- 4.4 If this patient presents with nasal discharge, sore throat, fever and worsening of difficulty in breathing of 2 days with oxygen saturation of 83%. How will you manage him at ETU for the 1st 4 hours? (40 marks)
05. A 60-year-old male with type 2 Diabetes Mellitus for 2 years duration presented with fever, dysuria and right side loin pain of 5 days duration.
- Examination findings are as follows;
 Temperature 38.9 °C, PR 120 bpm regular, BP 80/50 mmHg and he has tenderness over the right loin area
 Patient is catheterized and 15 ml of urine was drained.
 Investigations are as follows.
 WBC 19,500/mm³, N-90%
 Hb 12.3 g/dl, Platelet 136,000/mm³
 CRP 185 mg/l
 Na⁺ 140 mmol/l, K⁺ 5.8 mmol/l
 BU 18 mmol/l
 HbA1C 10.2%, RBS on admission 420 mg/dl



- 5.1 What is the working diagnosis for this presentation? (10 marks)
- 5.2 List other investigations that you will do for this patient and give reasons. (30 marks)
- 5.3 How will you manage this patient during first 6 hours? (40 marks)
- 5.4 Outline the long term management plan for his diabetes mellitus. (20 marks)
- 06 A 30-year-old female presented with exertional tiredness of 2 months duration. On admission she is noted to be pale, mildly icteric and has mild splenomegaly. She also has few patches of vitiligo.
- Her investigations are as follows.
Hb – 6.5 g/dl , MCV 105 fl, reticount 10%,
WBC 6000/mm³, N – 70%, L-25%, Platelet – 215,000/mm³,
ESR 75 mm 1st hour
- 6.1 What is the working diagnosis? (10 marks)
- 6.2 What further information you would gather from the patient to identify the aetiology of the condition mentioned in 6.1? (30 marks)
- 6.3 What further investigations will assist in the diagnosis? Give the expected findings. (30 marks)
- 6.4 How will you treat this patient? (30 marks)
07. A 45-year-old male presented to emergency department with haemetemesis. He is a heavy alcohol consumer for last 10 years duration. He has a family history of liver disease. On admission he is noted to be pale, bilateral parotid swelling, dark in complexion, bilateral ankle oedema, PR is 110 bpm, BP 80/60 mm Hg, mild splenomegaly and ascites.
- His initial investigations are as follows.
Hb 7.5 g/dl, MCV 103 fl, WBC 3600/mm³, N-72%, L-24%
Platelet 110,000/mm³
S. albumin 2.2 g/dl, globulin 4.0 g/dl
- 7.1 What is the diagnosis? (15 marks)
- 7.2 What are the likely aetiological causes for this condition mentioned in 7.1 (15 marks)
- 7.3 How will you manage him in the emergency department? (40 marks)
- 7.4 What further investigations you will request to identify the aetiological cause mentioned in 7.2 (30 marks)

08. A 40-year-old female presented with a history of bilateral painful swelling of small joints of both hands for 2 months duration which was associated with morning stiffness, lasting for more than one hour. She also has shortness of breath for last 2 weeks duration. Examination reveals active arthritis involving bilateral 2nd, 3rd, 4th proximal interphalangeal joints and wrist joints and fine bibasal crepitations of the lung.

Investigations are as below.

Hb 8.1 g/dl

WBC 6000/mm³, Platelet 450,000/mm³

MCV 84 fl

ESR 110 mm 1st hour

- 8.1 What is the complete diagnosis? (10 marks)
- 8.2 Give the 4 likely causes for her shortness of breath. (20 marks)
- 8.3 Give 6 extra articular manifestation of this disease. (30 marks)
- 8.4 What further investigations will help in the evaluation of this patient? Give reason (40 marks)

09. A 40-year-old farmer presents to Accident and emergency department with a history of an unidentified snake bite 3 hours prior while he was working in the paddy fields. He also admits that he has double vision and drooping of eye lids. On examination, he has swollen and tender area at the site of bite with excessive bleeding. Bed side 20 WBCT is more than 20 minutes.

- 9.1 What is the offending snake? (10 marks)
- 9.2 What investigations you will perform and give reasons? (25 marks)
- 9.3 How do you manage this patient in first 24 hours? (30 marks)
- 9.4 List four expected complications. (20 marks)
- 9.5 What advices you would give on discharge? (15 marks)

10. A 55-year-old male on a background of adult polycystic kidney disease presents with reduced urine output of one week duration. He was treated for joint pain 3 weeks ago with diclofenac sodium. His serum creatinine done one month ago was 1.4 mg/dl.

Investigations done on this admission are shown below.

FBC – Hb 8.6 g/dl

MCV 86 fl

WBC 6000 / mm³ (N-70, L-26)

Platelet – 186,000/mm³

Serum creatinine – 2.6 mg/dl

S. Na⁺ - 138 mmol/l, S. K⁺ - 5.2 mmol/l

UFR – Albumin - +

Pus cells – 1-2/hpf

RBC – 10 – 15 / hpf

Cast – Nil

Random blood glucose – 100 mg/dl

- 10.1 What is the diagnosis for this presentation? (10 marks)
- 10.2 List four precipitating factors for the condition you have mentioned in 10.1 (20 marks)
- 10.3 List three causes for his microscopic haematuria. (15 marks)
- 10.4 List five causes for anaemia. (25 marks)
- 10.5 How do you manage anaemia in this patient? (30 marks)