



UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023

ACADEMIC YEAR 2015/2016

Medicine - Paper II

Date: 10.07.2023

Time: 03 hours

Question No 01

Index No.:.....

A 45-year-old man presents with fever of two weeks duration. He also has fatigue and shortness of breath over a week. On examination he has a good volume regular pulse of 110/minute, BP of 140/60 mmHg and an early diastolic murmur heard over the left lower sternal edge. Abdominal examination reveals a mild non-tender splenomegaly.

Initial investigations are shown below

- WCC 13200/mm<sup>3</sup>(4000-11000), N 80%, L17%
- Hb 10.5 g/dl(11.5-15.5)
- Platelet 140,000/mm<sup>3</sup>(150,000-400,000)
- CRP 128mg/L(<5)
- UFR Pus cells 6-8/HPF
- RBC 8-10/HPF

1.1 Name the valvular heart disease he is suffering from? (10 marks)

.....

1.2 Name an acquired and congenital cause for the above valvular lesion? (10 marks)

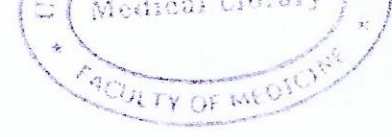
Acquired.....

Congenital.....

1.3 Name five peripheral physical signs you would look for to support the clinical diagnosis mentioned in 1.1. (15 marks)

.....  
.....  
.....  
.....  
.....





**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023**  
**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 02**

**Index No.: .....**

A 27-year-old man presents with low backache and pain over the right buttocks which is worse in the morning for a period of 3 months duration. As the day progress the pain is improving and again recur at bed time. His maternal uncle had a similar joint ailment and was bed bound after a decade.

2.1 What is the most probable clinical diagnosis for the above rheumatological presentation? (10 marks)

.....

2.2 Name **two** other conditions that share similar clinical manifestations? (10 marks)

.....  
 .....

2.3 Name a bedside clinical examination to assess the mobility of his spine? (10 marks)

.....

2.4 Name **two** other extra articular manifestations of the above condition? (10 marks)

.....  
 .....

2.5 Name a genetic test to support your clinical diagnosis? (10 marks)

.....





**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023**  
**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 03**

**Index No.:.....**

A 32-year-old primary school teacher is referred to medical clinic for further evaluation of weight gain. She is already under evaluation for menstrual irregularity and subfertility by gynaecology team. She is diagnosed with type 2 diabetes one year ago. She is quite upset that she is unable to lose weight despite of strict diet and regular exercise. Her BP is 150/100 mmHg.

3.1 List **four** differential diagnosis for her clinical presentation? (20 marks)

.....  
 .....  
 .....  
 .....

On further evaluation, her investigations are as follows

RBS	245 mg/dl
UFR	normal
Serum creatinine	60 $\mu$ mol/L(53-98)
Na	132 mmol/l(136-145)
K	3.0 mmol/l(3.5-5.5)

3.2 What is the most appropriate diagnosis you will consider in this patient among the causes mentioned in 3.1?

(05 marks)

.....



3.3 List relevant clinical signs you will expect to see in this patient to support the diagnosis mentioned in 3.2? (20 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3.4 List the investigations and the expected findings you will perform in this patient to confirm the diagnosis mentioned in 3.2? (30 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

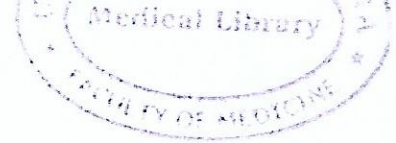
.....

.....  
.....  
.....  
.....  
.....

3.5. Briefly outline the management of this patient?

(25 marks)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023**

**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 04**

**Index No.:.....**

A 55-year-old businessman referred to medical ward with abdominal distension and bloating. On examination, he was found to have ascites.

4.1 List **five** clinical signs on examination which would support the diagnosis of chronic liver cell disease in this patient? ( 10 marks)

.....  
 .....  
 .....  
 .....  
 .....

4.2 Outline the pathophysiological mechanism of ascites formation in chronic liver cell disease? ( 15 marks)

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....





4.3 Briefly outline the management of ascites in this patient?

(30 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

4.4 List the investigations you will arrange to identify the underlying aetiology of chronic liver cell disease in this patient? ( 10 marks)

.....

.....

.....

.....

.....

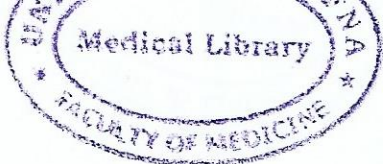
.....

4.5 Over the last 24 hours he passed only 250 ml of urine. What is the likely complication he has developed? (10 marks)

.....

4.6 Briefly outline the management of this complication? (25 marks)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



UNIVERSITY OF JAFFNA, SRI LANKA  
FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023  
ACADEMIC YEAR 2015/2016

Medicine - Paper II

Date: 10.07.2023

Time: 03 hours

Question No 05

Index No.:.....

A 70-year-old man presents with mid thoracic back pain of 2 weeks with weakness of both lower limbs and retention of urine of one day duration. On examination he has local tenderness in the mid thoracic area and a sensory level at T10.

5.1 What is the neurological diagnosis? (10 marks)

.....

5.2 How will you further assess him in the history to find out the underlying aetiology? (30 marks)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



5.3 Discuss the investigations you need to perform in this patient with reasons? (30 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

5.4 Brief out the management of this patient? (30 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023**  
**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 06**

**Index No.:.....**

A 55-year-old man presents with worsening of cough and shortness of breath of 3 weeks duration. Examination reveals a hard cervical lymph node on the left side with evidence of left sided massive pleural effusion.

6.1 List **three** causes for the above clinical presentation. (15 marks)

.....  
 .....  
 .....

6.2 Discuss the investigations you need to perform in this patient? (40 marks)

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

6.3 On the 2<sup>nd</sup> day of admission he was found to be confused. List three possible causes for the confusion in this patient? (15 marks)

.....

.....

.....

6.4 Outline the management of the left sided massive pleural effusion. (30 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....





**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - July 2023**  
**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 07**

**Index No.:.....**

A 45-year-old woman presents with tiredness and shortness of breath on moderate exertion of 2 months duration. Clinical examination reveals pallor, koilonychia and mild ankle oedma. Rest of the examination is normal.

Her FBC shows the following:

Hb	6.0g/dL(11.5-15.5)
MCV	65 fl(80-96)
WBC	8200/mm <sup>3</sup> (4000-11000)
Platelet	450000/mm <sup>3</sup> (150000-400000)

7.1 Write the haematological diagnosis of this patient? (10 marks)

.....

7.2 What further information in the history would be useful to identify the aetiology of the diagnosis mentioned in 7.1 (20 marks)

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....

.....  
.....  
.....  
.....  
.....  
.....

7.3 Write **four** expected findings in the blood picture of this patient? (10 marks)

.....  
.....  
.....  
.....

7.4 How do you confirm the diagnosis mentioned in 7.1? (10 marks)

.....  
.....  
.....

7.5 Outline the management of this patient? (40 marks)

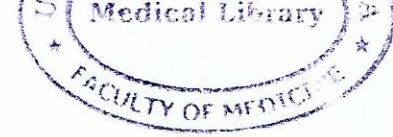
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

7.6 Patient was discharged with oral medications after the initial management. Haemoglobin on discharge was 8g/dL. On clinic review at one month haemoglobin is found to be 6.5 g/dL.

Give **four** likely reasons for non-responding. (10 marks)

.....  
.....  
.....  
.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - July 2023**  
**ACADEMIC YEAR 2015/2016**  
**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 08**

**Index No.:.....**

A 24-year-man admits with bilateral leg swelling and facial puffiness associated with reduced urine output for 3 weeks duration. On examination he has facial puffiness and bilateral pitting oedema up to mid shin. His blood pressure is 170/80 mmHg.

His investigations are as follows.

UFR	Protein	++
	RBC	50-60/HPF (dysmorphic red cells 20%)
	Pus cells	8-10/HPF
Hb	11g/dL(11.5-15.5) , MCV 83 fl(80-96)	
WBC	11700/mm <sup>3</sup> (4000-11000)	
Platelets	420000/mm <sup>3</sup> (150000-400000)	
CRP	48 mg/L(<5)	
ESR	94 mm/hour (<20)	
Serum creatinine	2.2 mg/dl(0.6-1.1)	

Ultrasound KUB- showed normal sized kidneys with increased echogenicity

8.1 What is the clinical syndrome described in this patient? (10 marks)

.....

8.2 List **three** specific features of the clinical syndrome described in 8.1 (15 marks)

.....  
 .....  
 .....



8.3 List **four** aetiology you would consider for the clinical syndrome mentioned in 8.1 (10 marks)

.....  
.....  
.....  
.....

During his stay in the hospital, he develops sudden onset of severe shortness of breath with occasional episodes of haemoptysis. Auscultation of the lungs reveals bilateral crepitations. SPO<sub>2</sub> is 90% on room air. Investigations reveal a drop of haemoglobin by 2g/dL.

8.4 What is the likely reason for the above clinical deterioration? (10 marks)

.....

His Chest X-Ray shows multiple cavitary lesions with alveolar type of shadows.  
His P-ANCA is positive

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

.....

8.6 List **two** essential investigations to arrive at a definitive diagnosis? (10 marks)

.....  
.....

8.7 Outline the management of this patient (35 marks)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023**  
**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question No 09**

**Index No.:.....**

**Part A**

A 60-year-old man with Type 2 diabetes mellitus with poor glycaemic control presents with a history of lethargy, loss of weight and low-grade fever of 2 months and productive cough of 6 weeks duration. On clinical examination, he has left upper zone crackles with no clubbing or enlarged cervical lymph node.

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

.....

9.2 List two important differential diagnosis you would consider in this patient? (10 marks)

.....  
 .....

9.3 List three investigations you will perform to arrive at a diagnosis mentioned in 9.1 (10 marks)

.....  
 .....

9.4 While in the ward, this patient developed massive haemoptysis. Outline the management of massive haemoptysis. (30 marks)

.....  
 .....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

**Part B**

A 20-year-old female (weight 40kg) presents with a history of fever of 6 days duration associated with myalgia, arthralgia and retro-orbital pain. On examination, she is afebrile, BP 100/90 mmHg, PR 126 bpm and has absent breath sounds on right base of the lung. She is clinically diagnosed with dengue haemorrhagic fever (DHF).

FBC done on day 6 shows:

WBC	2560/mm <sup>3</sup> (4-11000)
Hb	15 g/dL(11.5-15.5)
Hct	45% (Base line haematocrit (Hct) – 36%)
Platelets	20,000/mm <sup>3</sup> (150-400000)

9.5 What is the hallmark feature of DHF? (10 Marks)

.....

9.6 List other **two** parameters (one clinical and one laboratory) that favours DHF than dengue fever in this patient

(10 Marks)

Clinical:

.....

Laboratory:

.....



9.7 Calculate the total amount of fluid to be given to this patient during the critical phase (10 Marks)

.....  
.....  
.....

9.8 List five clinical parameter that should be monitored in this patient (10 Marks)

.....  
.....  
.....  
.....  
.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JULY 2023**  
**ACADEMIC YEAR 2015/2016**

**Medicine - Paper II**

**Date: 10.07.2023**

**Time: 03 hours**

**Question 10**

**Index No.:.....**

**Part A**

A 35-year-old labourer was admitted, 3 hours after an unidentified snakebite at the paddy field. On admission, he had pain and bleeding at the site of bite in the right ankle. He also complained of double vision and drooping of his eyelids.

10.1 What bed side investigation you would do immediately? (10 Marks)

.....

10.2 What is the most likely offending snake? (10 Marks)

.....

10.3 Outline the management of this patient during first 4 hours of admission (30 marks)

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....



.....  
.....  
.....  
.....

**Part B**

A 16-year- old school girl presents to A&E, 30 minutes after ingestion of a few “Alary (Kaneru)” seeds. On admission, she complains of dizziness and vomiting. On examination, she is restless, pulse rate is 52 bpm, and her BP is 90/60 mmHg.

10.3 What is the active agent which causes the clinical syndrome and briefly explain the mechanism of action? (10 marks)

.....  
.....  
.....  
.....  
.....

10.5 List **two** investigations you would carry out in this patient with expected findings. (10 marks)

.....  
.....

10.6 What will be your immediate steps of management in this patient? ( 20 marks)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....



.....  
.....

10.7 List the complication/s you anticipate in this patient?

(10 marks)

.....  
.....  
.....