



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

Date: 16.01.2024

Time: 1.30 pm to 4.30 pm (03 hours)

Answer All Ten Questions

Index Number: .....

**Question Number: 01**

**Part A**

A 35-year-old male is found to have a BP of 160/100 mmHg (left arm) on routine medical checkup.

1.1 How will you confirm hypertension in this patient? (05 marks)

.....

1.2 His right arm BP is 180/110mmHg while the left arm BP is 160/100mmHg. Give two (2) possible aetiologies of hypertension you would consider in this patient? (10 marks)

.....

.....

1.3 What further physical signs would help to identify each aetiology of hypertension mentioned in 1.2? (15 marks)

.....

.....

.....

.....

.....

.....

.....

.....

1.4 Discuss the assessment of Hypertension Mediated Target Organ Damage in this patient?  
Explain with reasons. (30 marks)

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

1.5 What antihypertensive agents you will consider in this patient? (10 marks)

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

**Part B**

A 70-year-old male with hypertension presents with palpitations and diagnosed as atrial fibrillation.

1.6 How do you assess the risk of thrombo-embolism in this patient? (15 marks)

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

1.7 List **three (3)** different classes of oral anticoagulants with an example that can be considered in this patient? (15 marks)

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



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date: 16.01.2024**

**Time: 1.30 pm to 4.30 pm (03 hours)**

**Answer All Ten Questions**

**Index Number: .....**

---

**Question Number: 02**

A 30-year-old female presents with palpitation and sweating of one month duration. On examination she is thin and has tremors of hands and goitre. Her pulse rate is 120/min, regular and BP is 120/60 mmHg.

2.1 What is the clinical diagnosis? (10 marks)

.....

2.2 Give **three (3)** possible aetiologies for the diagnosis mentioned in 2.1. (15marks)

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

2.3 How will you investigate this patient to evaluate and diagnose the aetiologies mentioned in 2.2. Write the expected findings? (30 marks)

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

2.4 The diagnosis mentioned in 2.1 is confirmed. How will you manage this patient?

(45 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Handwriting practice lines consisting of 20 horizontal dotted lines.



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date: 16.01.2024**

**Time: 1.30 pm to 4.30 pm (03 hours)**

**Answer All Ten Questions**

**Index Number: .....**

**Question Number: 03**

A 21-year-old male who worked as a sales representative and recently lost his job as he was abusing alcohol, presents with a history of fever of one-week duration and shortness of breath of two days duration. Physical examination reveals a temperature of 102°F, prominent neck venous pulsation and self-inflicted cut injury marks over the left forearm. His pulse rate 110/min regular, BP 90/60 mmHg, respiratory rate 36/min and the SpO<sub>2</sub> on ambient air is 92%. Further systemic examination reveals a pansystolic murmur in the left lower sternal edge. Abdominal examination reveals mild tender hepatomegaly.

3.1 What is the most probable clinical diagnosis? (10 marks)

.....

3.2 Name **three (3)** other physical signs you would look for to support your clinical diagnosis. (15 marks)

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

3.3 Name **three(3)** important risk factors for the condition you mentioned in 3.1. (10 marks)

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

3.4 Name **two(2)** essential investigations you would perform to confirm the clinical diagnosis mentioned in 3.1. (10 marks)

.....  
.....

3.5 Outline the principles of management of the condition you mentioned in 3.1. (45 marks)

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



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

While receiving treatment in the ward, he develops productive cough with pleuritic chest pain. Examination reveals coarse crepitation and bronchial breathing over the midzone of the left lung.

3.6. What complication he has developed?

(10 marks)

.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date: 16.01.2024**

**Time: 1.30 pm to 4.30 pm (03 hours)**

**Answer All Ten Questions**

**Index Number: .....**

**Question Number: 04**

A 35-year-old football player sustained a right knee injury and was treated with diclofenac sodium and omeprazole for two weeks duration. While on medications, he presents with feeling unwell with generalized malaise. He denies any symptoms of urinary tract infection. On examination vitals are normal. Mild pedal oedema was noted. This patient is clinically diagnosed with Acute Kidney Injury (AKI).

His investigations are as follows.

UFR	Protein:	1 +	
	RBC:	Nil /HPF	
	Pus cells:	10-20/HPF	
FBC	Hb	11g/dL	(12.5-15.5) MCV 83 fl(76-96)
	WBC	11.7 x10 <sup>9</sup> /L	(4-11x10 <sup>9</sup> )
	Platelets	260 x 10 <sup>9</sup> /L	(150-400x10 <sup>9</sup> )
CRP		28 mg/dL	(<5)
ESR		55 mm/hour	(<20)
Uric acid		7.8 mg/dL	(3.5-7.2)
Serum creatinine		5.8mg/dl	(0.7-1.1)
Serum sodium		138 mmol/l	(135-145)
Serum potassium		4.6 mmol/l	(3.5-5.0)
RBS		100mg/dL	
Urine protein creatinine ratio:		1.4 mg/mg	(less than 0.15 mg/mg)

4.1 Define Acute Kidney Injury (AKI). (15 marks)

.....

.....

.....

.....

.....

4.2 What is the likely aetiology for the AKI in this patient? (10 marks)

.....

4.3 Name the histological diagnosis expected in this patient. (10 marks)

.....

4.4 What further investigations you would perform in this patient? Write the expected findings? (15 marks)

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

4.5 Outline the management of this patient. (30 marks)

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

4.6 What are the indications for initiating hemodialysis in this patient? (20 marks)

.....

.....

.....

.....

.....

.....



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date: 16.01.2024**

**Time: 1.30 pm to 4.30 pm (03 hours)**

**Answer All Ten Questions**

**Index Number: .....**

**Question Number: 05**

**Part A**

A 64-year-old previously healthy man presents with a history of low back pain of 3 months duration which was associated with lethargy, increased urine output, loss of appetite and loss of weight. On examination, his vitals are stable and has tenderness over the lower back. Rest of the clinical examination is unremarkable.

Results of his initial investigations are as follows

Hb	9.2 g/dL	(13.5-17.0)
WBC	4600/mm <sup>3</sup>	(4000 -11000)
Platelets	120,000/mm <sup>3</sup>	(150000-400000)
ESR	126 mm 1 <sup>st</sup> hour	(<20)
Serum albumin	2.8 g/dL	(3.5-5.0)
Serum globulin	5.6g/dL	(2.0-3.5)
Ionized calcium	7.6 mg/dL	(4.65 - 5.25)
Serum creatinine	2.4 mg/dL	(0.6-1.20)
FBS	80mg/dL	(70-100)

X-ray lumbosacral spine Osteopenia and fracture of L1 vertebra

5.1 What is the most likely clinical diagnosis? (10 marks)

.....

5.2 Name an investigation essential to arrive at a diagnosis? (5 marks)

.....

5.3 What do you expect in the following investigations of this patient?

a. Blood picture

(15 marks)

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

b. Alkaline phosphatase

(5 marks)

.....

5.4 List **three (3)** reasons for his high serum creatinine for the diagnosis mentioned in 5.1.

(15 marks)

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

5.5 List the steps in the management of hypercalcaemia in this patient.

(20 marks)

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

**Part B**

A 25-year-old female is evaluated for spontaneous bruising. She reports a history of heavy menses since menarche, requiring treatment for iron deficiency anemia. Her mother and maternal uncle also have a history of bleeding. She takes no medications.

On physical examination, vital signs are normal. She has ecchymosis on her extremities, but her skin texture and joint mobility are normal. The rest of the examination is unremarkable.

Her investigations are as follows

Activated partial thromboplastin time	41 s	(26-37)
Hb	11.5g/dL	(11.5-15.5)
WBC	8000/mm <sup>3</sup>	(4000-11000)
Platelet count	140,000/mm <sup>3</sup>	(150000-400000)
Prothrombin Time	13 s	(11.5-13.5)
Factor VIII	46%	(>50%)

The platelet function testing result is **abnormal**.

5.6 What is the likely diagnosis? (10 marks)

.....

5.7 How do you confirm the diagnosis? (10 marks)

.....  
.....

5.8 List **three(3)** medications used to treat this condition. (10 marks)

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



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date: 16.01.2024**

**Time: 1.30 pm to 4.30 pm (03 hours)**

**Answer All Ten Questions**

**Index Number: .....**

---

**Question Number: 06**

A middle-aged male was found unresponsive on the road side and was brought by the police to A&E. At the time of admission, he is confused, breathing spontaneously and localising the pain. No relatives are available to give a history.

6.1 List the physical signs that you would look for to identify the cause of unresponsiveness in this patient. Give the expected abnormalities. (30 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....









UNIVERSITY OF JAFFNA, SRI LANKA  
FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024  
ACADEMIC YEAR 2016/2017

Medicine - Paper II

Date: 16.01.2024

Time: 1.30 pm to 4.30 pm (03 hours)

Answer All Ten Questions

Index Number: .....

Question Number: 07

Part A

A previously healthy 60-year-old female presents with progressive effort intolerance for last six months. Examination reveals bilateral fine crepitations of both lower zones of the lung and clubbing. Rest of the examination is unremarkable.

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

.....

7.2 Give **three (3)** relevant noninvasive investigations you need to perform in this patient to arrive at the diagnosis mentioned in 7.1. Give the expected findings. (15 marks)

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

7.3 List the investigations to identify the aetiologies of the diagnosis mentioned in 7.1. (15 marks)

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



A series of horizontal dotted lines, approximately 20 in total, spanning across the upper half of the page, likely intended for writing or as a separator.



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date: 16.01.2024**

**Time: 1.30 pm to 4.30 pm (03 hours)**

**Answer All Ten Questions**

**Index Number: .....**

---

**Question Number: 08**

A 56-year-old male with hypertension and ischemic heart disease presents with recurrent episodes of mono-arthritis involving knee joint and first MetaTarsoPhalangeal(MTP) joint. His regular medications are Hydrochlorothiazide (HCT) 25 mane, Aspirin 75 mg noct and Enalapril 10mg BD. On examination he is afebrile, pulse rate 92 bpm, BP 150/95 mmHg, right MTP joint is swollen and tender with limited movements. Other joints are clinically normal.

8.1 What is the likely clinical diagnosis of this presentation? (10 marks)

.....

8.2 How will you confirm your diagnosis? (10 marks)

.....

.....

8.3 How will you treat the condition mentioned in 8.1? (20 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

Two months later he presents with fever with right knee joint pain and swelling for 2 days duration. On examination he is febrile, pulse rate 120bpm, BP 70/40mmhg, right knee joint is swollen, warm, red and tender with limited movements.

8.4 What is the clinical diagnosis of this presentation? (10 marks)

.....

8.5 How do you confirm the diagnosis mentioned in 8.4? (10 marks)

.....

.....

8.6 Outline the management of the condition mentioned in 8.4. (40 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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





**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024**  
**ACADEMIC YEAR 2016/2017**

**Medicine - Paper II**

**Date:** 16.01.2024

**Time:** 1.30 pm to 4.30 pm (03 hours)

**Answer All Ten Questions**

**Index Number:** .....

---

**Question Number: 09**

A 55-year-old farmer was brought to A&E by his neighbor with the history of reduced responsiveness. He was last seen well an hour prior to admission. On examination pulse rate is 40/min, BP is 70/50mmHg, pupils are pinpoint bilaterally and excessive sweating is noted. GCS 12/15. RBS 110mg/dL.

9.1 What is the likely diagnosis? (10 marks)

.....

9.2 What further physical signs you will look for to support the diagnosis mentioned in 9.1? (20 marks)

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

9.3 Outline the management of this patient in the first hour of admission. (40 marks)

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



Despite improvement with initial treatment, he developed weakness of shoulders and difficulty in lifting the head on day 4 of admission.

9.5 What is the likely reason for this clinical deterioration? (10 marks)

.....

9.6 List **two (2)** long term complications of the diagnosis mentioned in 9.1. (10 marks)

.....

.....



UNIVERSITY OF JAFFNA, SRI LANKA  
FINAL EXAMINATION FOR MEDICAL DEGREES - JANUARY 2024  
ACADEMIC YEAR 2016/2017

Medicine - Paper II

Date: 16.01.2024

Time: 1.30 pm to 4.30 pm (03 hours)

Answer All Ten Questions

Index Number: .....

**Question Number: 10**

A 20-year-old male presents to a medical ward with blood and mucus diarrhea (8 times/day) with urgency and left sided abdominal pain for 3 months duration. He has no other medical comorbidities or significant family history. He states that he has stopped smoking 3 months ago.

10.1 List down **three (3)** differential diagnoses for the above presentation? (10 marks)

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

10.2 List down **five (5)** noninvasive investigations you would arrange to find out the etiology. (10 marks)

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

On further evaluation, his colonoscopy showed mild to moderate confluent inflammation from rectum to mid transverse colon and biopsy series reveal chronic inflammation of the mucosa with crypt distortion and crypt abscess.

10.3 What is the diagnosis? (10marks)

.....

10.4 List down **four (4)** medications you would use to treat the above-mentioned diagnosis? (10marks)

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

Three months later while on treatment he presents to a casualty ward with mucus diarrhea of 15 times/day with bleeding per rectum and urgency for 3 days duration. On examination he looks unwell, pale, pulse rate 110/min, BP 100/60mmHg with significant left iliac fossa tenderness.

Basic investigations are as follows:

White cell count	12 000/mm <sup>3</sup>	(4000-11000)
Hemoglobin	9g/dl	(12.5-15.5)
Platelet	490 000/mm <sup>3</sup>	(150000-400000)
CRP	45mg/dl	(<5)
Serum albumin	3.0g/l	(3.5-5.0)
K+	3.4meq/l	(3.5-5.0)

Stool culture and Clostridium difficile toxin results are negative.

10.5 What is the most likely diagnosis for this presentation? (10marks)

.....

10.6 Outline the management of this patient during this admission? (40marks)

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

10.7 What complications he may develop due to the above condition mentioned in 10.5. (10marks)

.....

.....

.....

.....

.....