



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
Final Examination for Medical Degrees – September 2026
SURGERY – PAPER 1

Index No

Thursday 3rd September 2026

3 hours (1.00p.m. to 4.00 p. m)

Answer ALL Eight (8) Questions

Q 1

- 1.1 Outline the difference in main objectives between triage in disaster management and triage of patients arriving at emergency department every day.

(15 Marks)

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- 1.2 Road Traffic accident has resulted in following casualties. As the doctor on site prioritize patients to be transported to hospital giving reasons.

(20 Marks)

Patient	condition	Priority order (1-7)	Rationale
A	35 year old man with Bruise in the forehead . GCS 5		
B	30 year old female with Abdominal pain and distension. Pulse 134/min, BP 85/55		
C	70 year old man with Deformity right lower leg		
D	Dislocation left elbow		
E	5 year old child walking crying loud		
F	18 year old female -not breathing		
G	25 year old with left chest wall bruise and distended neck veins.		

1.3 Name **three (03)** examination findings (signs) which may assist in differentiating between **two (02)** main possible diagnoses for patient **G** in 1.2

(15 Marks)

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- 2
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- 3
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1.4 Outline the management of **two (02)** conditions mentioned in 1.3

(20 Marks)

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1.5 List **three (03)** chest injuries where eFAST is helpful in diagnosis.

(15 Marks)

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1.6 Mention **three (03)** complications which can happen on insertion of a chest drain and indicate how it can be avoided.

(15 Marks)

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Q 2

- 2.1 Briefly explain what you understand by anomalies in normal development and involution (ANDI) in breast giving an example for each. *(10 Marks)*

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- 2.2 State the management of following benign breast conditions.

- 2.2.1 Breast abscess in a lactating mother *(10 Marks)*

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- 2.2.2 Fibroadenoma confirmed by FNAC measuring 6 cm diameter. *(10 Marks)*

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A 48- year-old post-menopausal female present with a lump in the upper outer quadrant of left breast. Early breast cancer with no enlarged axillary lymph nodes was diagnosed after triple assessment. Breast conservation treatment is being considered.

- 2.3 State **four (04)** absolute contraindication for breast conservation surgery *(20 Marks)*

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[illegible][illegible][illegible]

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Q 3

A 60-year-old man presents to the urology outpatient clinic with a 6-month history of significant lower urinary tract symptoms (LUTS). He has no fever, haematuria or loin pain. General and abdominal examinations are unremarkable. Digital rectal examination reveals an approximately 60 ml prostate with benign features.

- 3.1 List **four (04)** voiding symptoms and **four (04)** storage symptoms that may be reported by this patient. **(08 Marks)**

Voiding symptoms

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Storage symptoms

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- 3.2. Outline **four (04)** essential assessments that should be performed at the initial evaluation of this patient and briefly state how each assessment would influence management

(12 Marks)

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- 3.3. Recommend **five (05)** lifestyle modifications for this patient and briefly explain the rationale for each recommendation. **(20 Marks)**

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- 3.4. Name **two (02)** classes of medication with their mechanisms which help to improve patients' symptoms giving an example for each. **(10 Marks)**

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- 3.5. After three months of lifestyle modification and medical therapy, voiding symptoms have improved but bothersome storage symptoms persist. Name an additional class of medications need to be considered with justification. **(10 Marks)**

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- 3.6 After one year of medical therapy, surgery is being considered. List **five (05)** indications for moving from conservative/medical management to surgical intervention.

(20 Marks)

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- 3.7 Mention **five (05)** surgical treatment options available for benign prostatic enlargement.

(20 Marks)

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Q 4

A 62-year-old obese woman with diabetes mellites underwent elective open anterior resection for a rectal carcinoma 05 days ago. The patient develops a spike of temperature 38.9⁰ C. On examination she had BP 110/70 mmHg, PR 102 bpm, RR 22/min, and O₂ saturation 95% on room air. Abdominal examination revealed a localized erythema, warmth, and serosanguinous discharge from the lower end of the surgical wound.

- 4.1.1 Give **two (02)** possible postoperative complications for her condition. **(10 Marks)**

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- 4.1.2 State **five (05)** predisposing factors for the complications you stated in 4.1.1 **(15 Marks)**

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- 4.1.3 State **four (04)** laboratory investigations and **one (01)** imaging test you would arrange initially to confirm and assess the severity of your diagnoses in 4.1.1 **(15 Marks)**

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- 4.2. Above imaging test shows only localized collection of pus under the skin and deeper tissues were intact.

- 4.2.1 What is the likely diagnose **(10 Marks)**

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4.2.2 Outline the management of this condition.

(30 Marks)

[illegible]

4.2.3 State **five (05)** steps you would take preoperatively to prevent the complication mentioned in 4.2.1

(20 Marks)

[illegible]

Q 5

A 68-year-old obese woman underwent total hip replacement surgery five days ago. She was mostly on the bed with poor mobilization due to poor pain tolerance and obesity. She complains of dull aching pain in her left calf muscle. On examination her left calf is swollen, warmth, and pitting oedema is noted up to the knee joint. There is a significant tenderness in the palpation of the calf muscle.

5.1.1 What is the most likely diagnosis? (10 Marks)

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5.1.2 State **three (03)** risk factors for her to develop the complication in 5.1.1 (15 Marks)

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5.1.3 Name the imaging you may request to diagnose the condition in 5.1.1 and mention a specific finding to confirm the diagnosis (15 Marks)

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5.2 Despite starting the treatment she developed sudden shortness of breath.

5.2.1 What is the life-threatening complication she has developed? (10 Marks)

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5.2.2 Name **two (02)** immediate bedside diagnostic tests you would perform to support your diagnosis and state expected findings. (20 Marks)

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[illegible]

Q.6

A 76-year male with hypertension, diabetes mellitus and ischemic heart disease presents to emergency department with abdominal pain, absolute constipation and massive abdominal distension for 6 days.

6.1. What is the clinical diagnosis ?

(10 Marks)

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6.2. List **five (05)** investigations you could perform during in the initial assessment

(10 Marks)

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6.3 Patient has tenderness in the right iliac fossa and imaging reveals distention of the caecum. Outline the clinical significance of these findings

(10 Marks)

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6.4 Investigations reveal a recto-sigmoid junction tumor.

Outline the management of this patient

(20 Marks)

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(30 Marks)

[illegible]

(20 Marks)

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Q7

A 56-year-old female with Diabetes mellitus and ischemic heart disease presents to emergency department with right hypochondriac pain and fever for five days.

- 7.1. Name **four (04)** likely causes other than acute cholecystitis *(10 marks)*

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- 7.2. List **five (05)** Investigations performed during initial evaluation *(10 Marks)*

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- 7.3. List **four (04)** Ultrasound scan features of recurrent acute cholecystitis *(10 Marks)*

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- 7.4. Briefly outline the initial management of acute cholecystitis *(20 Marks)*

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Q 8

A 40-year-old female with history of hypertension awaits routine open cholecystectomy. Her medication includes Losartan 50mg twice daily. Her body weight is 125 kg.

- 8.1 Mention with reasons, **five (05)** pre-operative problems you would encounter in preparation of this patient for surgery **(30 Marks)**

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- 8.2 Briefly outline an appropriate premedication plan for this patient **(20 Marks)**

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- 8.3 State pre-operative fasting instructions for the patient. **(10 Marks)**

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Patient underwent surgery on the following day and her intraoperative period was uneventful.

- 8.4 Calculate the postoperative fluid management for the first 24 hours. **(20 Marks)**

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8.5 Write the postoperative Pain management for the first 24 hours

(20 Marks)

[illegible]