

UNIVERSITY OF JAFFNA, SRI LANKA
FINAL EXAMINATION FOR MEDICAL DEGREES–NOVEMBER 2016
SURGERY PAPER II



Date: 24.11.2016

Time: 03 hours & 30 minutes

ANSWER ALL THE TEN QUESTIONS

Answer each part in separate answer book

Part A

1 A 65 year old patient, who had swollen left leg for many years, presented with pain on that leg of one week duration. On examination, he was febrile and had enlarged left inguinal lymphnodes. He had signs of lymphoedema of left leg with cellulites

- 1.1 What are the causes of lymphoedema of leg? (20 Marks)
- 1.2 What are the types of lymphoedema? (10 Marks)
- 1.3 What are the physical signs favoring lymphoedma of leg? (20 Marks)
- 1.4 List the complications of lymphoedema? (10 Marks)
- 1.5 How will you manage this patient? (30 Marks)
- 1.6 What advise will you give to this patient to prevent complications occurring? (10 Marks)

Part B

2 Read the following three case scenarios and answer the following questions.

Case scenario I –

62 year woman presented with bone pain at multiple sites and polyuria for last one year. The examination revealed 2 cm solid nodule in her right lower neck, lateral to the midline.

Case scenario II –

40 year woman presented with a single solid palpable nodule in her left lower neck lateral to the midline which moves with swallowing.

Case scenario III –

32 year woman presented with paroxysmal hypertension and her abdominal examination revealed an intra abdominal mass in the right lumber region.

- 2.1 Give one most probable clinical diagnosis for each case scenario. (15 Marks)
- 2.2 What are the other ways of presentation of each clinical condition which you have mentioned in question 2.1? (15 marks)
- 1.3 List the investigations that will help you to arrive at a diagnosis with interpretations will help you to arrive the diagnosis in each clinical diagnosis mentioned in question 2. 1. (50 marks)
- 2.4 Brief the specific pre operative management related to the case scenario III. (20 marks)

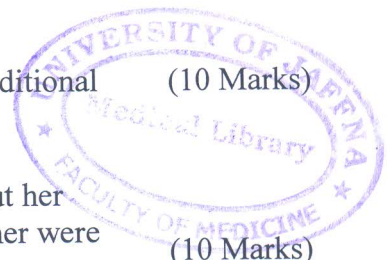
Part C

3 A 44 year old woman presented with severe right upper abdominal pain of 2 days duration. She had nausea, vomiting and fever. On examination she had right hypochondrial tenderness with localized guarding but she was not icteric.

- 3.1 What would be the most possible diagnosis in this woman? (15 Marks)
- 3.2 How will you investigate this patient to arrive at a diagnosis ? (15 Marks)
- 3.3 What are the possible complications of this disease in this patient? (15 Marks)
- 3.4 How do you treat this woman? (25 Marks)
- 3.5 List the important surgical complications, which may occur during or after the surgical treatment? (15 Marks)
- 3.6 If the patient develops jaundice after surgical treatment, give three possible causes for the jaundice? (15 Marks)

4 36 year old lady complains of blood stained discharge from the right nipple for 3 weeks duration. She has 2 children and younger one is 4 years old. She had stopped breast feeding 2 years ago.

- 4.1 List 5 most common reasons for her nipple discharge. (15 Marks)
- 4.2 What information in her history about nipple discharge will suggest that she may have a lesion suspicious of malignancy? (15 Marks)
- 4.3 How will you investigate this patient to arrive at a diagnosis? (15 Marks)



- 4.4 If you are working in a well equipped hospital, what is the additional test you may be able to offer her? (10 Marks)
- 4.5 What would be the management option if she is worried about her nipple discharge despite all the investigations performed on her were normal? (10 Marks)
- 4.6 If her investigations reveal a 3 cm invasive ductal carcinoma, how will you manage her? (35 Marks)

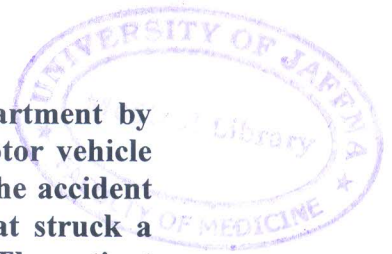
Part D

- 5 **A 64 year old male diabetic on regular haemodialysis for End Stage Renal Failure developed sudden onset of severe epigastric pain while on dialysis. His blood pressure dropped from 110/80 to 90/60 mm Hg and his pulse rate increased to 120 from 90 beats per minute. Dialysis was stopped and he was transferred to the surgical emergency ward for further management. He refused to move and wanted to stay flat on bed. Physical examination revealed mild distention of abdomen with absent bowel sounds, and diffuse involuntary guarding. A supine X-ray of the abdomen was unremarkable.**
- 5.1 What is the probable diagnosis? (05 Marks)
- 5.2 What sign in your clinical examination would support the diagnosis? (05 Marks)
- 5.3 What investigation would you request to confirm the diagnosis if you are working in a base hospital? (05 Marks)
- 5.4 What feature in the above investigation helps to arrive at a diagnosis? (05 Marks)
- 5.5 How would you prepare this patient for emergency surgery? (35 Marks)
- 5.6 Briefly mention the steps in pain management of this patient during postoperative period in the general ward. (20 Marks)
- 5.7 On 5th post-operative day he develops fever and tachypnoea. Examination revealed a healthy surgical wound. What would be the possible cause for the fever and how would you investigate to identify the cause you mentioned? (10 Marks)
- 5.8 Following surgery the patient was started on parenteral feeding. List the complications of parenteral nutrition. (15 Marks)

- 6 A 43year old primary schoolteacher was referred by a general practitioner to surgical outpatient clinic for further evaluation of positive faecal occult blood test. Her mother died of metastatic colonic cancer**
- 6.1 Enumerate the other investigations needed to arrive at a diagnosis. (05 Marks)
- 6.2 Mention the action / actions you would take, based on the findings in the above mentioned investigation. (25 Marks)
- 6.3 List the symptoms in this patient that will favour the diagnosis of rectal cancer? (20 Marks)
- 6.4 How would you further investigate her to stage the disease if she has rectal cancer? (15 Marks)
- 6.5 Describe the TNM staging of rectal cancer. (20 Marks)
- 6.6 Mention the measures you would consider to prevent deep vein thrombosis in this patient if she undergoes anterior resection. (15 Marks)

Part E

- 7 A 70 year old man, who has been a heavy smoker for over twenty years, is admitted with a two day history of frank painless haematuria with the passage of clots. He also gives a one year history of Lower Urinary Tract Symptoms including poor stream and having to occasionally strain to pass urine.**
- 7.1 Give two most likely causes for the above clinical presentation. (10 Marks)
- 7.2 What physical signs will you elicit in this patient to arrive at a diagnosis? (20 Marks)
- 7.3 What are the investigations you would do to find a cause for his hematuria (20 Marks)
- 7.4 Give the indication for urethral catheterization in this patient. Mention the type of catheter that would be used and briefly describe the technique of catheterization. (20 Marks)
- 7.5 Briefly mention the treatment for any one of the causes you have given for 7.1. (30 Marks)



8 **A 27 year old man is brought to the emergency department by ambulance after he sustained injuries in a one car motor vehicle collision. The ambulance driver said that a witness to the accident reported that the patient was the driver of a car that struck a telephone pole head on and was not wearing a seat belt. The patient is immobilized with a cervical collar and spinal board. He is conscious and says he has chest pain. His pulse rate is 130/min, respiratory rate is 40/min, and the systolic blood pressure is 80 mmHg. On physical examination, the neck veins are distended, the trachea is displaced to the left, and the right side of the chest is hyper resonant to percussion with muffled breath sounds.**

- 8.1 What is the priority of steps for the initial evaluation of this patient? (30 marks)
- 8.2 During your assessment you observe that his breathing is getting worse and he is struggling to talk. (30 Marks)
What is the most likely cause for his vital signs being abnormal and his worsening breathing and describe how you will manage it?
- 8.3 Which type of intravenous fluid should be administered initially in this patient and in what quantities? (20 Marks)
What would be the indications for blood transfusion?
- 8.4 He was brought in wearing a cervical collar. How will you decide if he needs to keep it on? (20 Marks)

Part F

9 **16 years old school boy presented with painful swelling in right lower thigh of 3 weeks duration. He felt pain more in the night and he did not have fever.**

- 9.1 List possible local and systemic clinical symptoms and signs you would elicit in this patient to arrive at a diagnosis? (15 Marks)
- 9.2 List the initial non-invasive investigations you would perform in this patient and give possible findings of these investigations? (40 Marks)
- 9.3 Mention different types of invasive investigations that can be done in this patient? (20 Marks)
- 9.4 What is the most probable diagnosis and how would you explain the diagnosis to the patient? (10 Marks)
- 9.5 Give the possible treatment options for this patient? (15 Marks)

Part G

- 10 a** A 10 year old child presented with fever, head ache right eye swelling, proptosis with impaired vision. The child also had purulent discharge from right nose for 5 days.
- i. List the haematological, microbiological and radiological investigations needed for the management of this child (15 marks)
 - ii. What is the most likely diagnosis (5 marks)
 - iii. List three possible organisms to cause the above clinical manifestation (5 marks)
 - iv. List the types of complications of the above clinical condition (5 marks)
 - v. Outline the management of the child (10 marks)
- 10 b** Write notes on complications of local anaesthesia (30 Marks)
- 10 c** A 45 year old male admitted to the surgical casualty ward following Road Traffic Accident and complained blurring of vision and diplopia
- i. Enumerate the possible causes. (15 marks)
 - ii. How do you initially manage before referring to ophthalmologist? (15 marks)