

UNIVERSITY OF JAFFNA, SRI LANKA
SECOND EXAMINATION FOR MEDICAL DEGREES (2 nd)—FEBRUARY 2019
PATHOLOGY Paper II

Date: 06.02.2019.

Time: 03 hours

ANSWER ALL THE TEN QUESTIONS

Answer each **QUESTION** in separate answer book

1.
 - 1.1 What is infarction?
 - 1.2 List the different types of infarction
 - 1.3 Describe briefly the pathogenesis of acute myocardial infarction (10Marks)
 - 1.4 Describe the microscopic features seen in acute myocardial infarction (20 Marks)
2.
 - 2.1 What are premalignant lesions? (50 Marks)
 - 2.2 List five premalignant lesions in the gastrointestinal tract including two conditions from the oral cavity. (10 Marks)
 - 2.3 Describe briefly the histopathological features that can be seen in any two of the conditions you mentioned in 2.2_ (25 Marks)
 - 2.4 Name a malignancy that may follow in any one of the conditions you mentioned in 2. (40 Marks)
 - 2.5 Briefly describe the microscopic features of the malignancy you mentioned in 2.4 (5Marks)
3. A 45 year woman was found to have mass in the right iliac fosses (20Marks)
 - 3.1 List three causes for the mass in this patient.
 - 3.2 Name two (02) investigations that can be performed to arrive at a diagnosis. (15 Marks)
 - 3.3 Briefly describe the macroscopic and microscopic features of any one cause you mentioned in 3.1. (10 Marks)
 - 3.4 Discuss the pathogenesis of the complication that may follow the condition you described in 3.3 (40 Marks)



4. Describe the microscopic features of the following tumours
- 4.1 Adenocarcinoma of the prostate (25 Marks)
 - 4.2 Clear cell type of renal cell carcinoma (25 Marks)
 - 4.3 Papillary urothelial carcinoma of bladder (25 Marks)
 - 4.4 Squamous cell carcinoma of the penis (25 Marks)
5. A 70year old woman presented to the gynaecological clinic with per vaginal bleeding for 2 weeks. Examination revealed a normal cervix and vagina,
- 5.1 Mention two possible causes for the above symptoms (20 Marks)
 - 5.2 Mention the procedure to be performed to obtain a diagnosis (10 Marks)
 - 5.3 Briefly describe the macroscopic and microscopic features of any one condition you mentioned in 5.1 (50 Marks)
 - 5.4 Name two (02) other anatomical sites which has the risk of developing primary malignancy in this patient. (20 Marks)
- Normal haemostasis depends on many factors
- 6.1 Draw the coagulation cascade (30) (30 Marks)
 - 6.2 Briefly outline the changes in haemostasis you would expect in disseminated intravascular coagulation (DIC) (15 Marks)
 - 6.3 List four (04) tests useful to confirm DIC and mention the expected findings (40 Marks)
 - 6.4 List five (05) different causes for DIC (15 Marks)
7. A patient was referred to Teaching Hospital Jaffna with a clinical suspicion of haemolytic anaemia
- 7.1 Define haemolytic anaemia (10 Marks)
 - 7.2 List four (04) laboratory tests (except FBC — full blood count) which will be useful to diagnose haemolytic anaemia and giving expected findings in haemolytic anaemia (24 Marks)
 - 7.3 Outline briefly pathological basis for the two different test findings you mentioned in 7.2 above (36 Marks)
 - 7.4 State briefly how you would differentiate intravascular from extravascular haemolysis (30 Marks)





8. A 60 year female admitted to the emergency unit with the history of confusion. She is a known patient with Type 2 diabetes mellitus (DM) of 20 years duration. Her random plasma glucose level on admission was 20.8 mmol/L.
- 8.1 Briefly describe the biochemical abnormalities that you would expect in this patient. (30 Marks)
- 8.2 Briefly describe the pathological changes that you would expect in
- i. Kidney (25 Marks)
- ii. Eye (15 Marks)
- 8.3 List three (03) investigations that you would do during the follow-up of the patient (30 Marks) and give the reasons for each of them.
9. A 50 year male presented with right sided pleural effusion.
- 9.1 List five (05) possible causes for the pleural effusion. (20 Marks)
- 9.2 Describe the pathological features (macroscopic and microscopic) of one of the causes you mentioned in 9.1 (40 Marks)
- 9.3 List the possible investigations that you would carry out on pleural aspirate and mention the possible changes you would expect in each causes you mentioned in 9.1 (40 Marks)
10. Mention two (02) aetiologies; risk factors, two (02) complications and the pathological changes (macroscopic and microscopic) that may occur in the following conditions
- 10.1 A 6 year boy presented with gradual onset of generalized oedema. His urine **output** was normal. Urine examination positive for albumin (50 Marks)
- 10.2 A 60 year male presented with progressive focal neurological deficit and a brain abscess was diagnosed (50 Marks)

