Faculty of Medicine University of Ruhuna
Third Examination for Medical Degrees (Part II) – October 2018
Pathology Paper I

Monday 29th October 2018 9.00 am to 11.00 am
Two hours

Answer **ALL FOUR** questions.
Answer each part in a **SEPARATE** book.

Part A

1. A 50 year-old male was admitted to the Emergency Care Unit with a history of chest pain which has commenced the previous day. He had diabetes mellitus but was not on regular treatment. He died soon after admission. Following postmortem examination, the cause of death was given as pulmonary oedema following myocardial infarction.

1.1 Describe the pathogenesis of pulmonary oedema in this patient from the time he developed chest pain. ***(40 marks)***

1.2 Describe the possible macroscopic and microscopic appearances of lungs in this patient. ***(20 marks)***

1.3 Describe the microscopic features of the myocardium that would confirm the presence of an infarction in this patient. ***(20 marks)***

1.4 List two other complications that he would have developed in the acute stage and briefly explain the pathogenesis of one of them. ***(20 marks)***

Part B

2. Describe how you would macroscopically differentiate the following.

2.1. Mature teratoma from immature teratoma ***(30 marks)***

2.2 Benign peptic ulcer from malignant peptic ulcer ***(30 marks)***

2.3. Ulcerative colitis from Crohn's disease ***(40 marks)***

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Part C

3. Explain the pathological basis of the following.

3.1 Ascites in a patient with cirrhosis ***(50 marks)***

3.2 Cranial nerve palsy in a patient who has had pyogenic meningitis ***(25 marks)***

3.3 Cushing's syndrome in a patient with bronchial carcinoma ***(25 marks)***

Part D

4.

4.1 Explain the basis of requesting the following tests in the given scenarios.

4.1.1 Faecal occult blood test for a 65 year-old patient presenting with hypochromic microcytic anaemia. ***(25 marks)***

4.1.2 Prothrombin time (PT) in a patient who presents with chronic liver disease. ***(25 marks)***

4.2 A 45 year-old farmer from Thanamalwila was referred to the medical clinic for further investigations. He had pallor, mild bilateral ankle oedema and elevated blood pressure for more than three months. Chronic kidney disease was the clinical diagnosis.

4.2.1 Explain the reasons which support the stated clinical diagnosis in this patient. ***(10 marks)***

4.2.2 State with justification four other essential biochemical investigations you would do in the diagnosis and management of this patient. ***(40 marks)***