Faculty of Medicine, University of Ruhuna
Third Examination for Medical Degrees (Part II) October/November 2013
Pathology Paper I

Thursday 31st October 2013 — 9.00 a.m. to 11.00 a.m.
Two hours

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

Part A

1. Describe briefly the **differences** between

1.1 hyperplasia and hypertrophy. *(30 marks)*

1.2 transmural and subendocardial myocardial infarction. *(30 marks)*

1.3 effects of atherosclerosis in aorta and medium sized arteries. *(40 marks)*

Part B

2. A 65 year-old heavy smoker presented with chronic cough of three months duration. He has developed recent onset haemoptysis and hoarseness of voice. A right supraclavicular lymph node was palpable.
Chest radiograph revealed a mass lesion in the right middle lobe of the lung with mediastinal widening and a small pleural effusion on the right side.

2.1 What is the most likely diagnosis in this patient? *(10 marks)*

2.2 List **five** further investigations you would request to confirm the diagnosis mentioned in 2.1, and state the expected findings in each. *(50 marks)*

2.3 Describe the different microscopic appearances of the lung lesion in this patient. *(40 marks)*

Part C

3. Explain the pathological basis of

3.1 deep vein thrombosis following major surgery. *(30 marks)*

3.2 intestinal obstruction in Crohn disease. *(30 marks)*

3.3 development of cirrhosis in chronic alcoholism. *(40 marks)*

Part D

4. A 52 year-old farmer from Monaragala presented to the medical clinic with moderate pallor and bilateral ankle odema. Urine analysis revealed proteinuria and his Hb was 8 g/dL.
Clinical diagnosis of chronic kidney disease was made.

4.1 List **five** other biochemical investigations you would request to support the diagnosis and management of this patient and explain the rationale for requesting them. *(30 marks)*

4.2 Explain the pathological basis of the bilateral ankle odema in this patient. *(20 marks)*

4.3 State the expected findings in the blood picture of this patient. *(15 marks)*

4.4 Explain the pathological basis of anaemia in this patient. *(35 marks)*