Faculty of Medicine, University of Ruhuna
Third Examination for Medical Degrees (Part II) - October 2012
Pathology Paper I

Wednesday 24th October 2012

9.00 a.m. to 11.00 a.m.
2 hours

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

Part A

1. Describe the pathological basis of the following.

1.1 Urinary tract infection in a male with benign prostatic hyperplasia *(30 marks)*

1.2 Ascites in a patient with alcoholic cirrhosis *(40 marks)*

1.3 Infarction of a toe in a patient with atheromatous plaques in the abdominal aorta *(30 marks)*

Part B

2. A 70 year-old male complained of persistent Productive cough of 3 weeks duration. His sputum was foul-smelling and some times blood stained. He has had such episodes for the past few years which had made him visit the medical clinic often. He had been treated for pulmonary tuberculosis 15 years ago. His current chest x-ray showed dilated airways.

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

2.2 Describe the pathogenesis of the condition mentioned in 2.1. *(40 marks)*

2.3 What are the expected light microscopic features of the lungs in this patient? *(40 marks)*

2.4 List **four** complications that may arise in this patient. *(10 marks)*

Part C

3. A 50 year-old female was referred to the medical ward with pyrexia of unknown origin and fatigue. She is a diagnosed patient with chronic rheumatic heart disease. On examination she had petechiae, splinter haemorrhages and Roth spots. A systolic murmur was heard on auscultation.

3.1 What is the most likely diagnosis? *(10marks)*

3.2 List three investigations which would help in confirming the diagnosis you have mentioned in 3.1. *(15marks)*

3.3 Describe the macroscopic appearance of the heart of this patient. *(50marks)*

3.4 Briefly describe the complications this patient may develop. *(25marks)*

Part D

4. Discuss how you would investigate a patient suspected of having multiple myeloma. Both laboratory and non-laboratory investigations should be included in your answer. The investigations should include the preliminary and confirmatory tests as well as those needed for detecting complications. State the expected findings and the pathological basis for each finding, for the investigations mentioned in your answer.