



**FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA, GALLE.**

**Third Examination for Medical Degrees (Part II) - August 2003**

**PATHOLOGY - PAPER I**

Wednesday 06<sup>th</sup> August, 2003

9.00 am to 11.00 am  
2 hours

Answer **ALL FOUR** Questions.

Answer each part in a **SEPARATE** book.

**Part A**

- 1 Describe the pathological differences between
- 1.1 hyperplasia and hypertrophy. (20 marks)
  - 1.2 transudate and exudate. (20 marks)
  - 1.3 morphology of chronic glomerulonephritis and chronic pyelonephritis. (30 marks)
  - 1.4 fibroadenoma and breast carcinoma. (30 marks)
- 2
- 2.1 Explain, giving examples, why patients with neoplasms are more prone to get infections. (40 marks)
  - 2.2.1 Describe the pathogenesis of lung abscess. (30 marks)
  - 2.2.2 Describe the postmortem appearances of the lung in lung abscess. (30 marks)

**Part B**

- 3 A 40 year-old female presented with dyspnoea and bilateral ankle oedema. During her childhood she had been advised to take monthly injections from the OPD which she has not continued.  
On examination she was found to have a loud first heart sound and a mid diastolic murmur.
- 3.1 Describe the pathogenesis of the condition that she had in her childhood. (30 marks)
  - 3.2 Briefly describe the sequence of pathological events that lead to her present cardiac condition. (30 marks)
  - 3.3 Describe the macroscopic appearance of her heart and lungs. (40 marks)

**Part C**

- 4
- 4.1.1 What is multiple myeloma? (10 marks)
  - 4.1.2 On what specimens do you do electrophoresis to assist the diagnosis of multiple myeloma?  
Describe the expected abnormal patterns on the electrophoretic strips. (20 marks)
  - 4.1.3 Comment on the significance of serum alkaline phosphatase in a patient with multiple myeloma. (10 marks)
  - 4.1.4 Discuss the importance of other relevant laboratory investigations that would help to diagnose this condition. (20 marks)
  - 4.2.1 What are the causes of Cushing's syndrome? (10 marks)
  - 4.2.2 List the relevant biochemical investigations that you would do in a patient with suspected Cushing's syndrome and state the expected findings of each investigation. (30 marks)