



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
Third Examination for Medical Degrees - Part 1
MEDICAL MICROBIOLOGY - Paper II

Tuesday 18th December 2007

10.30 am to 12.30 pm

Answer ALL FOUR questions

Answer each question in a separate answer book

1. Describe the **pathogenesis** of the following:
 - 1.1 Dengue haemorrhagic fever (30 marks)
 - 1.2 Pseudomembranous colitis (25 marks)
 - 1.3 Toxic shock syndrome (25 marks)
 - 1.4 Aspergilloma (20 marks)

2. Identify the relevant specimen/s and describe their collection and transport for microbiological investigations of the following suspected clinical entities:
 - 2.1 Community acquired pneumonia (30 marks)
 - 2.2 Cystitis in a catheterised patient (20 marks)
 - 2.3 Watery diarrhoea of 2 days duration in an infant (20 marks)
 - 2.4 Bronchiolitis in a one-year old child (15 marks)
 - 2.5 Onychomycosis in a housewife (15 marks)

3.
 - 3.1 List the serological markers of hepatitis B virus infection. (15 marks)
 - 3.2 Briefly discuss how you would interpret the presence or absence of the serological markers mentioned in 1.1 in relation to the clinical disease and prognosis. (50 marks)
 - 3.3 Describe the steps involved in the management of a healthcare worker who has had a needle stick accident while drawing blood from a HBsAg positive patient. (35 marks)

4. Write notes on the following.
 - 4.1 Type I hypersensitivity (35 marks)
 - 4.2 Sterilization by heat (35 marks)
 - 4.3 Methicillin resistant *Staphylococcus aureus* (30 marks)