



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA  
Third Examination for Medical Degrees Part I - August / September 2011  
MEDICAL MICROBIOLOGY - Paper II

Tuesday 30<sup>th</sup> August 2011

10.30 am to 12.30 pm

Answer ALL FOUR questions

Answer each question in a separate answer book

---

1. List the aetiological agents, describe the pathogenesis and antimicrobial management of the following conditions.
  - 1.1 Cellulitis (35 marks)
  - 1.2 Onychomycosis (30 marks)
  - 1.3 Genital ulcers (35 marks)
  
2. Write on
  - 2.1 the methods of transmission of pathogens in health care settings. (35 marks)
  - 2.2 handwashing. (30 marks)
  - 2.3 principles underlying the collection of a good specimen for microbiological diagnosis. (35 marks)
  
3. Write on
  - 3.1 acute uncomplicated UTI. (35 marks)
  - 3.2 neonatal meningitis. (35 marks)
  - 3.3 laboratory diagnosis of human immunodeficiency virus (HIV) infection. (30 marks)
  
4. A 55 year-old bus conductor presented to the OPD complaining of weight loss, fever towards evening and sweating at night and productive cough of 2 months duration. His ESR was found to be 110 mm in the 1<sup>st</sup> hour.
  - 4.1 What is the most likely diagnosis? (5 marks)
  - 4.2 List two microorganisms capable of causing the condition stated in 4.1. (10 marks)
  - 4.3 Describe the microbiological investigation/s including the collection and transport of specimens that would help to confirm the diagnosis stated in 4.1. (25 marks)
  - 4.4 Name an immunologically based investigation that may assist in the diagnosis of the condition stated in 4.1 and describe how the test is performed and the results are interpreted. (25 marks)
  - 4.5 Discuss the antimicrobial therapy of the condition stated in 4.1. (25 marks)
  - 4.6 Discuss the infection control measures that you would adopt when treating this patient in a medical ward. (10 marks)