



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
Third Examination for Medical Degrees Part 1 – December 2010
MEDICAL MICROBIOLOGY - Paper II

Tuesday 7th December 2010

10.30 am to 12.30 pm

Answer ALL FOUR questions

Answer each question in a separate answer book

1. A 34 year old man presented with an ulcer on his external genitalia of 1 week duration.
 - 1.1 What is the differential diagnosis? (15 marks)
 - 1.2 Discuss how you would arrive at a clinical diagnosis in this patient. (30 marks)
 - 1.3 Describe the microbiological investigations you would do to arrive at a diagnosis. (30 marks)
 - 1.4 List the antimicrobials that can be used in the treatment of the conditions mentioned in 1.1. (15 marks)
 - 1.5 Describe the follow up measures you would take in the management of this patient. (10 marks)

2. Identify the causative pathogen/s, and describe the microbiological diagnosis with special reference to collection and transport of specimens, in the following suspected conditions.
 - 2.1 Leptospirosis. (20 marks)
 - 2.2 Tinea capitis (kerion). (20 marks)
 - 2.3 Influenza. (20 marks)
 - 2.4 Renal tuberculosis. (20 marks)
 - 2.5 Viral diarrhoea. (20 marks)

3. List the aetiological agents, outline the pathogenesis and discuss the empiric antimicrobial therapy of the following.
 - 3.1 Acute otitis media. (25 marks)
 - 3.2 Septic arthritis. (25 marks)
 - 3.3 Urinary tract infection. (25 marks)
 - 3.4 Cellulitis. (25 marks)

4. Write on
 - 4.1 Use of heat as a method of sterilization in hospitals. (25 marks)
 - 4.2 *Haemophilus influenzae* b vaccine. (25 marks)
 - 4.3 Use of specific immunoglobulins in the management of infectious diseases. (25 marks)
 - 4.4 Hospital Associated Infections. (25 marks)