



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA  
Third Examination for Medical Degrees Part I – November 2019

MICROBIOLOGY - Paper II

Monday 11<sup>th</sup> November 2019  
Answer ALL FOUR questions.

10.30 a.m. to 12.30 p.m.  
(2 hours)

Answer each question in a separate answer book.

---

1. A 30-year-old male presented to the sexually transmitted infection (STI) clinic complaining of urethral discharge of 2 days duration.
  - 1.1 What is the most likely diagnosis? (10 marks)
  - 1.2 What is the likely infective agent/s? (15 marks)
  - 1.3 List the microbiological investigations that would help in confirming the clinical diagnosis and briefly describe the collection and transport of the relevant specimens. (30 marks)
  - 1.4 Briefly discuss the interpretation of the results of the investigations listed in 1.3. (20 marks)
  - 1.5 How would you treat this patient? (10 marks)
  - 1.6 Outline further management of this situation. (15 marks)
  
2. Briefly describe the steps that should be adopted in the following situations.
  - 2.1 Detection of a suspected measles rash in a medical student. (35 marks)
  - 2.2 Multiple bites with bleeding on hand in a child by an unobservable stray dog. (35 marks)
  - 2.3 Preparing surgical instruments to be reused following an operation. (30 marks)
  
3. Write briefly on
  - 3.1 Complement system. (35 marks)
  - 3.2 Fluoroquinolones. (35 marks)
  - 3.3 *Haemophilus influenzae* type b vaccine. (30 marks)
  
4. State the causative pathogen/s and describe the microbiological investigations with special reference to collection and transport of specimens in the following conditions.
  - 4.1 Tinea corporis in a young adult. (35 marks)
  - 4.2 Pneumonia in a ventilated patient in the intensive care unit. (30 marks)
  - 4.3 Neonatal meningitis. (35 marks)