



UNIVERSITY OF RUHUNA
FACULTY OF MEDICINE
Third Examination for Medical Degrees (Part I)
26th October 2021
MICROBIOLOGY – Paper II



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

Answer ALL FOUR questions.

Answer each question in a separate answer book

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1. A 35-year-old female presented to the outpatient department with dysuria, frequency and lower abdominal pain for 3 days. On examination she was mildly febrile and there was tenderness over suprapubic region.
 - 1.1 What is the most likely diagnosis? (10 marks)
 - 1.2 List **three (3)** likely causative pathogens. (15 marks)
 - 1.3 Outline the pathogenesis of the condition stated in 1.1 (15 marks)
 - 1.4 State the most appropriate microbiological investigation that would help in confirming the aetiological agent. (10 marks)
 - 1.5 Briefly describe the collection and transport of the relevant specimen to the laboratory. (30 marks)
 - 1.6 State **two (2)** antibiotics which are used in the empirical treatment of this condition. (10 marks)
 - 1.7 Name **two (2)** possible complications of this condition. (10 marks)

 2. Briefly describe the steps that should be adopted in the following situations.
 - 2.1 Spillage of a serum sample on the floor of the laboratory. (30 marks)
 - 2.2 Reuse of contaminated surgical instruments used in the theatre. (35 marks)
 - 2.3 A pregnant mother develops chickenpox 2 days prior to the expected date of delivery while in the ward. (35 marks)

 3. Write briefly on
 - 3.1 MMR vaccine (35 marks)
 - 3.2 aminoglycoside antibiotics (35 marks)
 - 3.3 type 1 hypersensitivity (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 Pharyngitis in a 6-year-old child (30 marks)
 - 4.2 Neonatal meningitis (35 marks)
 - 4.3 Pityriasis versicolor (35 marks)