



FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF RUHUNA

Department of Medical Laboratory Science

Third End Semester Examination – March/April 2025

MLS 2112 General Bacteriology & Immunology – Theory II

Date: 27<sup>th</sup> March 2025

Time: 10.15 a.m. – 11.15 a.m.

Duration: 01 hour

Answer all questions

Index Number: .....

**Provide answers for each question in a separate book.**

**01.**

- 1.1 List **four** characteristics of bacteria considered for their classification. (20 marks)
- 1.2 Briefly explain the functions of the following bacterial cell structures. (30 marks)
  - 1.2.1. Cell wall
  - 1.2.2. Capsule
- 1.3 Describe the types of mutations occurred in bacteria. (20 marks)
- 1.4 Explain the nutritional requirement of bacteria. (30 marks)

**02.**

- 2.1 Define the term 'immune responses'. (10 marks)
- 2.2 How does the innate immune system differ from adaptive immune system? (20 marks)
- 2.3 Briefly describe how a hapten differs from an immunogen. (20 marks)
- 2.4 List **five** components of the of humoral immunity. (20 marks)
- 2.5 Briefly describe the innate immune responses against viral infections. (30 marks)