



UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
SECOND YEAR FIRST SEMESTER EXAMINATION IN BScHons (MLS) – 2023
MLSIM 2144 IMMUNOLOGY

Date: 03.12.2024

Time: 2 Hours

ANSWER ALL SIX QUESTIONS

1.
 - 1.1. List two (02) primary lymphoid organs and two (02) secondary lymphatic organs of immune system. (10 marks)
 - 1.2. Compare and contrast T and B lymphocytes. (30 marks)
 - 1.3. Briefly describe the mechanism of T cell activation. (30 marks)
 - 1.4. Explain the role of natural killer cells in innate immunity. (30 marks)
2.
 - 2.1 Outline the classification of immunoglobulin and their functions. (30 marks)
 - 2.2. Describe the basic structure of immunoglobulin with a diagram. (40 Marks)
 - 2.3. Briefly describe the factors that could influence the immunogenicity of the antigens. (30 marks)
3. Write short notes on,
 - 3.1. HLA typing (30 marks)
 - 3.2. Pathophysiology of type 1 hypersensitivity reactions (40 marks)
 - 3.3. Biological importance of complements (30 marks)
4. Briefly describe the principle and the clinical applications of the following tests
 - 4.1. Sandwich ELISA (30 marks)
 - 4.2. Latex agglutination test (30 marks)
 - 4.3. Immunofluorescence test (40 marks)



5.

- 5.1. Define "Monoclonal antibodies" (15 marks)
- 5.2. Describe the steps involved in the production of monoclonal antibody (50 marks)
- 5.3. Discuss the applications of monoclonal antibodies in clinical laboratory diagnosis (35 marks)

6.

- 6.1. List five (05) autoimmune diseases (20 marks)
- 6.2. Explain the immunological mechanism of any two diseases mentioned 6.1. (40 marks)
- 6.3. Briefly describe the laboratory tests involved in the diagnosis of the diseases mentioned in 6.2. (30 marks)