

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES**  
**SECOND YEAR SECOND SEMESTER EXAMINATION – JANUARY 2013**

**MLSIM 2202 IMMUNOLOGY**

**PAPER II**

**Date: 22.01.2013**

**Time: 2 hours**

**ANSWER ALL SIX QUESTIONS.**

1.
  - 1.1 Define precipitation **(10 Marks)**
  - 1.2 Describe different types of precipitation **(60 Marks)**
  - 1.3 Enumerate on the advantages of precipitation **(30 Marks)**
  
2. Briefly describe the following laboratory tests
  - 2.1 Direct and Indirect Coombs test **(60 Marks)**
  - 2.2 Complement fixation test **(40 Marks)**
  
3.
  - 3.1 What is Immunofluorescence **(10 Marks)**
  - 3.2 Give the principle of Immunofluorescence **(20 Marks)**
  - 3.3 Describe the types of Immunofluorescence **(50 Marks)**
  - 3.4 Enumerate the advantages of each type mentioned in 3.3 **(20 Marks)**
  
4. Write short notes on
  - 4.1 Sandwich ELISA **(40 Marks)**
  - 4.2 Live attenuated vaccines **(30 Marks)**
  - 4.3 Type I hypersensitivity **(30 Marks)**

5. Briefly describe the immunopathogenesis and laboratory investigation of the following diseases

5.1 Systemic Lupus Erythmatusus ( SLE) **(50 Marks)**

5.2 Rhematoid arthritis **(50 Marks)**

6.

6.1 Describe the cellular mechanisms of the non specific immune response **(60 Marks)**

6.2 Give an account of Major Histocompatibility Complex (MHC) products **(40 Marks)**

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