

**QP Code: 104385**

**Reg. No.....**

**First Year M.Sc. MLT Degree Supplementary Examinations January 2023  
(Microbiology)  
Paper IV - Immunology**

**Time: 3 hrs.**

**Max. marks: 100**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays:**

**(10x10=100)**

1. Define and classify immunity. Describe innate immunity in detail.
2. Type I hypersensitivity in detail with suitable examples.
3. Flow cytometry- principle and applications in microbiology.
4. Classify antigen –antibody reactions. Describe agglutination reactions with suitable clinical applications.
5. Describe briefly immunology of malignancy.
6. Primary lymphoid organs.
7. Structure and functions of class I and II Major Histocompatibility Complex (MHC) molecules.
8. Structure and function of Immunoglobulin A.
9. Graft versus host reaction.
10. Cytokines.

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