

QP Code: 104385

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations  
July 2025  
(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. What are immunoglobulins. Describe the structure, properties and biological functions of each type of immunoglobulin. (2+8)
2. Phagocytosis and antigen-presenting cells.
3. MHC molecules-definition, classification, and role in immunity.
4. Immunoassays.
5. Hypersensitivity reactions-definition, classification and explain Type I reaction. (1+3+6)
6. Flow cytometry and its immunological applications.
7. Define immunity. Discuss on acquired immunity.
8. Immune responses.
9. Principle, techniques and applications of precipitation reactions.
10. What is immunodeficiency. Classify it. Explain disorders of specific immunity. (1+3+6)

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