

**QP Code: 104385**

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

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations**

**April 2021**

**(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. Differentiate between active and passive immunity with examples.
2. Type IV hypersensitivity in detail with suitable examples.
3. Enzyme Linked Immunosorbent Assay (ELISA)- principle and applications in Microbiology.
4. Describe biological effects of complement. Add a note on complement deficiency diseases.
5. Immunological tolerance and its clinical applications.
6. Principle and production of monoclonal antibody and its applications.
7. HLA (Human Leukocyte Antigen) typing.
8. Structure and functions of Immunoglobulin M.
9. Mechanisms of autoimmunity.
10. Conjugate vaccines.

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