

QP Code: 104385

Reg. No.....

**First Year M.Sc. MLT Degree Supplementary Examinations March 2024  
(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 autoimmunity. What are the features of autoimmunity. Write about organ specific autoimmune disorders. (2+4+4)
2. Classify hypersensitivity reactions. describe Type 1 hypersensitivity reactions in detail. (4+6)
3. Discuss the structure and functions of Major histocompatibility complex. Add a note on MHC restriction. (6+4)
4. Enzyme linked immunosorbent assay: Principle, generations and application.
5. Define antigen. What are the factors affecting the antigenicity. Add a note on super antigens. (2+4+4)
6. Write an essay on activation and regulation of complement path ways.
7. Describe general structure of an antibody. Write about IgM. Add a note on abnormal immunoglobulin. (4+4+2)
8. Coombs Test: Principle and application.
9. Viral vector-based vaccines: Principle and application with example.
10. Interferon Gamma assay: Principle and application with an example.

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