

QP Code: 101109

Reg. No.:.....

**PG Degree Supplementary Examinations in Microbiology (MD)  
January 2024**

**Paper I – General Microbiology and 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*

**Essay: (20)**

1. Classify autoimmune disorders. Discuss the mechanisms of autoimmunity with examples. Write a note on the methods of detection of Autoimmune disorders. Add a note on immunomodulators used in the treatment of these disorders with examples.

**Short essays: (8x10=80)**

2. Virulence mechanisms in bacteria
3. Type IV hypersensitivity reaction
4. Role of Biomarkers in diagnosis of sepsis
5. Superantigens
6. Enumerate the methods of pathogen typing. Discuss the role of molecular methods in typing with examples
7. Quality control in sterilisation and disinfection
8. List the Beta lactam + Beta lactam inhibitor combination antibiotics. Discuss their mechanism of action, uses and their application in the detection of antimicrobial resistance
9. Natural Killer cells

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