

**QP CODE: 114012**

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

**First Year B.Sc MLT Degree Supplementary Examinations August 2022**

**Basic Microbiology and Immunology**

**(2016 Scheme)**

**Time: 3 Hours**

**Total 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**

**(2x10=20)**

1. Classify antigen- antibody reactions. Describe the principle, different types and applications of Enzyme Linked Immunosorbent Assay (ELISA). (3+1+3+3)
2. Define sterilization. Enumerate the different methods of moist heat sterilization. Describe in detail the principle, working, applications and sterilization controls of autoclave. (1+2+7)

**Short notes**

**(10x5=50)**

3. Gram staining
4. Walk- in -incubator
5. Plasmid
6. Disinfection of operation theatres
7. Exotoxins
8. Agglutination reactions and its applications
9. Delayed hypersensitivity
10. Biomedical waste management in microbiology lab
11. Major Histo Compatibility Complex(MHC)
12. Tests for determining the efficacy of disinfectants

**Answer briefly**

**(10x3=30)**

13. Gram negative cell wall
14. Adjuvants
15. Immunoglobulin E
16. Bacterial capsule
17. Natural active immunity
18. Nosocomial infection –define with two examples
19. Natural Killer (NK) cells
20. Iodophores
21. Cold sterilization
22. Contributions of Alexander Fleming

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