

QP CODE: 114012

Reg. No:

**First Year B.Sc MLT Degree Supplementary Examinations
November 2021**

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. Define STAINs. What are differential staining techniques. Describe the methods of differential staining (with diagrams) and discuss the clinical applications. Add a note on special stains and purpose of such stains & automation in staining. (2+2+4+2)
2. List the antigen-antibody reactions. Describe in detail the application of various agglutination reactions in the clinical laboratory. (2+8)

Short notes

(10x5=50)

3. Aldehydes as disinfectants
4. Chick Martin test
5. Classify microbes on the basis of hazards and methods of preventing infection
6. Robert Koch
7. Define flagella. What are the various flagella arrangements. How will you demonstrate flagella.
8. Washing, cleaning, packing and sterilization of glassware in microbiology
9. Negative staining
10. Bacterial capsule and its role in pathogenicity
11. Passive immunity with examples
12. Dry heat sterilization

Answer briefly

(10x3=30)

13. Innate immunity and determinants
14. Hypochlorites
15. Cell wall and cell wall deficient forms
16. Classical complement pathway
17. BOD incubator
18. Cytokines
19. Ethylene oxide
20. Subunit vaccines
21. Sterilization controls for various methods
22. Type IV hypersensitivity
