

First Year B.Sc MLT Degree Supplementary Examinations
February 2020
Basic Microbiology & Immunology

(Common for 2010 and 2015 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. Enumerate the different sources of infection. Describe in detail with examples how infections are transmitted to others (4+6)
2. Enumerate the staining methods used in microbiology. Explain in detail the mechanism of gram's staining (4+6)

Short notes

(10x5=50)

3. Contributions of Robert Koch
4. Filtration methods for sterilization and disinfection
5. Sterilization of culture media
6. Alternate pathway of complement activation
7. Immunofluorescence
8. Immunodeficiency diseases
9. Principles of humoral immunity
10. Antigens and their properties
11. Type IV hypersensitivity
12. Structure and functions of major histocompatibility complex

Answer briefly

(10x3=30)

13. Sporicidal disinfectants
14. Bacterial capsule
15. Cell wall deficient forms of bacteria
16. Immunoglobulin M
17. Rideal Walker test
18. Interferon
19. Name four examples of agglutination reactions
20. Differences between prokaryotic and eukaryotic cells
21. Pasteurization
22. Natural killer cells
