

**Second Year B.Sc MLT Degree Supplementary Examinations July 2025**

**General Microbiology**

**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 Diagrams wherever necessary.*

**Essay**

**(2x10=20)**

1. Discuss in detail the different methods of gene transfer in bacteria. (10)
2. List out the tests for detection of enzymes in bacteria. Describe any two in detail. (2+8)

**Short notes**

**(10x5=50)**

3. Anaerobic culture methods
4. Plasmids
5. Bacterial growth curve
6. Mice as a laboratory animal
7. Quality control in media preparation
8. Selenite F broth
9. McFarland Standard
10. Bacteriophage typing
11. Triple sugar iron test
12. Transport media

**Answer briefly**

**(10x3=30)**

13. Mutation
14. Indole test
15. Bacteriocin
16. Facultative anaerobes
17. Lawn culture & its uses
18. Germ free animal.
19. Thermal death point
20. MacConkey agar
21. Capnophilic bacteria
22. Tellurite blood agar