

**Second Year B.Sc MLT Degree Regular/Supplementary Examinations  
April 2023**

**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. Describe the different gene transfer mechanisms that occur in bacteria. Discuss its clinical significance. (7+3)
2. Enumerate tests for metabolism of proteins and amino acids. Describe in detail any two of them. (5+5)

**Short notes**

**(10x5=50)**

3. Bacterial growth curve
4. Colony morphology on plated media
5. Mc Farland's Standards and its interpretation.
6. Rabbit as a laboratory animal
7. Bacteriophage typing
8. Transposons
9. Triple sugar Iron agar Composition Principle and Interpretation.
10. Anaerobic culture media
11. pH indicators
12. Robertson's Cooked Meat Medium

**Answer briefly**

**(10x3=30)**

13. Slide coagulase test
14. Routes of inoculation in mice
15. Chocolate agar
16. Standard opacity tubes.
17. Agar-agar
18. Viable count
19. Bacterial Motility testing media
20. ONPG test
21. Capnophilic bacteria
22. Euthanasia