

**Second Year B.Sc MLT Degree Regular/Supplementary Examinations
May 2021**

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. Define bacterial growth curve. Explain the different phases of it. (2+8)
2. Enumerate the tests used for the detection of bacterial enzymes. Explain any two. (2+8)

Short notes

(10x5=50)

3. Bacteriophage typing.
4. Colony morphology on plated media.
5. Transduction.
6. Robertson's cooked meat medium.
7. Collection of blood from mouse.
8. Triple sugar iron agar medium.
9. Germ free animals.
10. Indole test.
11. Viable count of bacteria.
12. Operon model of gene expression

Answer briefly

(10x3=30)

13. Methyl red test.
14. Tellurite blood agar medium.
15. Gelatin liquefaction test.
16. Quality control of Mac Conkey's agar medium.
17. Alkaline peptone water.
18. 'R' factor.
19. Agar agar.
20. Influence of carbon dioxide upon bacterial growth.
21. Sterilization of culture media.
22. Name three pH indicators and their pH range