

**Third Year B.Sc MLT Degree Regular/Supplementary Examinations  
May 2023  
Bacteriology**

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. Explain the pathogenesis and laboratory diagnosis of *Corynebacterium diphtheriae*.  
(2+8)
2. Name any four bacteria causing sexually transmitted infections. Describe the laboratory diagnosis of syphilis.  
(2+8)

**Short notes**

**(10x5=50)**

3. Toxins produced by *Streptococcus pyogenes*.
4. Laboratory diagnosis of Tetanus.
5. Antimicrobial sensitivity testing methods.
6. Scrub typhus.
7. Laboratory diagnosis of cholera.
8. Actinomycosis.
9. Laboratory diagnosis of Leptospirosis.
10. Atypical mycobacteria.
11. Widal test.
12. Laboratory diagnosis of Pneumococcal meningitis.

**Answer briefly**

**(10x3=30)**

13. Plague.
14. Rat bite fever.
15. *Serratia marcescens*.
16. Non typhoidal salmonella.
17. Beta lactam antibiotics.
18. *Mycoplasma pneumoniae*.
19. *Helicobacter pylori*.
20. Enterohaemorrhagic *Escherichia coli* (EHEC).
21. Cough plate technique.
22. Significant bacteriuria.

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