

QP Code: 101385

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations**

**August 2024**

**(Microbiology)**

**Paper I - General Microbiology**

**Time: 3 hrs.**

**Max. 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*

**Essays:**

**(10x10=100)**

1. Electron Microscope and its applications in Diagnostic microbiology. (7+3)
2. Discuss about methods for preservation of bacteria
3. Describe the tests for metabolism of carbohydrates in diagnostic microbiology.
4. Describe the structure of bacterial spores. Explain the steps of sporulation. Add a note on demonstration of spores. (2+4+4)
5. Thiosulfate–citrate–bile salts–sucrose (TCBS) agar: Principle, composition and interpretation with examples.
6. Classify culture media. Add a note on enrichment and transport media. (2+4+4)
7. What are F factor and R factor. Explain bacterial conjugation in detail. (3+7)
8. Briefly describe Koch's postulates with examples.
9. Discuss sporicidal disinfectants and testing of disinfectants. (7+3)
10. Biosafety cabinets: Types, specifications and uses. Add a note on bioterrorism agents. (8+2)

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