## First Year M.Sc. MLT Degree Examinations – October 2014 (Microbiology)

PAPER - I GENERAL MICROBIOLOGY

Time : 3 hrs.

Max. marks : 100

- Answer all questions
- Draw diagrams wherever necessary

## Essays:

(10x10 = 100)

- 1. Describe the structure of bacterial cell wall and capsule in detail.
- 2. Describe the principle, structure, applications and quality checks for hot-air oven.
- 3. Enumerate and describe briefly the safety measures to be taken in microbiology laboratory.
- 4. Acid fast staining- Principle, modifications and applications.
- 5. Enumerate and describe briefly the virulent factors of bacteria.
- 6. Describe the rapid and automated methods for bacterial identification.
- 7. Discuss the genetic mechanism of drug resistance in bacteria.
- 8. Describe the media used, principle and quality controls used for performing urease test and citrate test.
- 9. Classification and applications of gaseous and radiation methods of sterilization.
- 10. Describe the structure of a bacterial spore and steps in sporulation.

\*\*\*\*\*

QP Code : 101385

Reg . No.....