B.Sc. MEDICAL LABORATORY TECHNOLOGY FIRST YEAR

PAPER III – GENERAL METHODOLOGY

Q.P. Code: 725003

Time: Three Hours Maximum: 100 Marks

Answer All questions

I. Elaborate on: $(3 \times 10 = 30)$

1. Compare gram positive and Gram negative bacterial cell wall.

- 2. Define sterilization and write briefly about moist heat sterilization.
- 3. Describe in detail about the method of collection, transportation and storage of clinical specimens for microbiological examination.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Describe the sources of errors in pre analytical phase.
- 2. Describe the routine maintenance of laboratory equipments.
- 3. Define (i) Mean (ii) Mode (iii) Median (iv) SD (v) CV
- 4. Write in short about laboratory information system (LIS).
- 5. Describe the various statistical formulae used in laboratory data analysis.
- 6. Anticoagulants and its uses.
- 7. Define total count and differential count.
- 8. Explain Dry Heat Sterilization.

III. Short answers on:

 $(10 \times 3 = 30)$

Sub.Code :5003

- 1. How will you prepare a blood smear?
- 2. Enlist the causes of hemolysis samples.
- 3. Write down sources of post analytical errors.
- 4. Write down the proper order of drawing blood samples.
- 5. What are the requirements for sample collection for an HIV test?
- 6. Principle and methods of ensuring quality assurance in the laboratory.
- 7. EDTA.
- 8. Define fimbria and its uses.
- 9. Seitz filter.
- 10. Define Lyophilization.
