

Course Code	Course Name	Credits
26BT153	MICROBIOLOGY LAB	02

Objective

The objective of this laboratory course is to enable students to understand the basic knowledge of microbiology and explain the different staining techniques. To demonstrate the culturing, growth and control of microorganisms. Impart the basic microbiological techniques and how they are applied in laboratory settings. Gain knowledge on laboratory skills and safety procedures.

1. Sterilization – Moist heat, Dry heat, Chemicals, Radiation and Filtration
2. Media Preparation (solid & liquid).
3. Isolation & Enumeration of Microorganism from water, soil and air.
4. Types of culture method Streak plate, Pour plate, Stab & Slant preparation.
5. Measurement of Growth rate of bacteria - Turbidometric method.
6. Microscopes – Basic Parts and Handling
7. Staining Techniques–Simple, Gram, Spore, Acid, Endospore staining and fungal staining.
8. Microscopic slide preparation –Fungi & Bacteria
9. Antibiotic sensitivity test
10. Micrometry

Students are required to perform and record at least eight experiments in the laboratory manual as part of the course requirements.

