

# **BIOTECHNOLOGY (3-0-0)**

## **Module - I**

Introduction and application of microbiology, Structure and functioning of bacterial cell, Classification and Identification criteria for bacteria. Nutritional requirements and nutritional types of bacteria.

## **Module – II**

Isolation of micro organisms, pure culture techniques and cultural characteristics. Bacterial growth, measurements and reproduction.

## **Module - III**

Fundamentals of microbiology ecology and ecosystems, microbial associations and interactions.

## **Module - IV**

Types of bacteria in water, sanitary examination of water, water purification, average disposal and sewage purification.

## **Recommended Books :**

1. Reid, P., Microbiology, TMH.
2. Atlas, R. M. & Bartha, R., Microbiology Ecology - Fundamentals and Applications.