

**MANGALORE**



**UNIVERSITY**

**DEPARTMENT OF BIOSCIENCES**

**MSc BIOTECHNOLOGY**

**PRACTICALS (SOFT CORE COURSES)**

**BTP 459 BIOPROCESS TECHNOLOGY**

**Course outcome**

The student will

- learn the instrumentation in industrial biotechnology
- develop skills in techniques used in processing
- learn to culture microorganisms of industrial importance in pilot scale
- develop skills in scaling up and industrial biotechnology

**Isolation of microbes of industrial importance**

Instrumentation in bioprocess technology

Growth and death kinetics of microbial cultures

**Cell encapsulation (immobilization) techniques and uses**

**Pilot-scale production of microbial (or plants or animal) cell products**

Downstream processing techniques

**Lyophilization**

Biosensors