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