

BTP 408 MICROBIOLOGY

Course outcomes:

After successful completion of the course, students will be

able to: CO 1. Have hands-on training and practical skills

in microbiology
CO 2. Use safety equipment in
microbiology

CO 3. Develop skills in isolation and culture of microorganisms from different
sources

CO 4. Carry out staining and identification of microorganisms
Microscopic observations of microorganisms
Microbial staining techniques (simple and differential staining, cell wall, endospores, intracellular lipids, acid-fast, flagella, viability)

Microbial motility tests
Sterilization techniques

Microbial culture media and their preparation
Isolation techniques

Maintenance of microorganisms (stock culture and subculture)
Microbial characterization based on biochemical tests

Quantitative and qualitative assessment of microflora in soil, water, air and food
Milk microbiology

Studies on bacteria, fungi and actinomycetes
Studies on symbiotic association of microorganisms

