

CORE COURSE VII - INDUSTRIAL BIOTECHNOLOGY

UNIT I:

Major classes of commercial products using micro organisms.

UNIT II:

Basic principles of Bio process, media formulation, sterilization. Batch and continuous sterilization system.

UNIT III:

Parts, Designing and types of fermentor, Down stream processing.

UNIT IV:

Bioprocess control and monitoring like temperature, pressure, agitation and pH. Computers in Bioprocess control.

UNIT V:

Industrial process of ethanol – vinegar – amylase – protease – glutamic acid.

REFERENCE:

1. Demain A.L. Solomon, J.J. (1986) Manual of industrial microbiology and Biotechnology. ASM press.
2. Reed C. (1982) Prescott and Dann's, Industrial Microbiology. Macmillan publishers.
3. Prave. P. Faust, V. Sitih. W., Sukatsh, DA (1987) Fundamentals of Biotechnology, ASM press.