

**CORE COURSE XII - ENZYME TECHNOLOGY**

**UNIT I:**

General properties of enzymes. Enzyme classification and nomenclature  
Assay and purification of Enzymes.

**UNIT II:**

Mechanism of enzyme action (Lysozyme, DNA polymerase, chymotrypsin  
RNase), Membrane bound enzymes – assay extraction.

**UNIT III:**

Clinical and industrial application of enzymes. Immobilisation of Enzymes  
and their uses. Enzyme engineering.

**UNIT IV:**

Different types of inhibitors – presteady state kinetics, steady state kinetics.  
Allosteric enzymes.

**UNIT V:**

A general account co-enzymes and their functions. Metallo enzymes,  
Reconstitution of enzymes. – General introduction to Biosensors.

**REFERENCE:**

1. Biological chemistry by H.r. Mabler and E. Corder (1986)
2. Enzyme by Dixon and Webb.
3. Molecular Biotechnology by Glick and Pasternack. ASM press 1994.