

## **BCC 102-P ENZYMOLOGY [P]**

**Practical Course Credit: 1**

**Contact Hours: 30**

1. Assay of enzyme activity, rate of reaction.
2. Determination of specific activity.
3. Determination of optimal pH for enzyme activity.
4. Determination of optimal temperature for enzyme activity.
5. Determination of  $K_m$ ,  $V_{max}$ .
6. Purification of enzyme: salting out; dialysis; gel filtration; determination of fold purification, percentage recovery of protein.
7. Molecular weight determination by SDS-PAGE.

### **Reference Books (Composite list for theory and practicals)**

1. Dixon & Webb., Enzymology
2. Harper, H., Review of Physiological Chemistry, Marusan Co
3. Stryer, L., Freeman, W.H., Biochemistry San Francisco.
4. Lehninger, A.L., Nelson, D.L., Cox, M.M. Principles of Biochemistry, Worth Publishers, New York.
5. Price & Stevens. Fundamentals of Enzymology.
6. Guyton & Hall. Textbook of Medical Physiology
8. Plummer, D.T., An introduction to practical biochemistry
9. Sadasivam, S. & Manickam A., Biochemical Methods. Publisher, New Age International (P) Limited.
10. Jayaraman J. Laboratory Manual in Biochemistry, John Wiley & Sons, Limited, Australia.
11. Sambrook, J., Fritsch, E.F., Maniatis, T. 1989. Molecular cloning: a laboratory manual, 2nd edn. Cold Spring Harbor Laboratory Press, New York.