BIOCHEMISTRY (BS-ADP 7th Semester)

Module Code: Chem-440
Module Title: Enzymology

Name of Scheme: BS-ADP 7th Semester Department: School of Chemistry

Faculty: Science
Module Type: Compulsory
Module Rating: 2 credits

OBJECTIVES

After studying these course students will be able to understand types of enzymes. It will also help to understand the factors affecting enzyme activity and Chemical kinetics of enzymes.

SYLLABUS OUTLINES

Chemical nature, nomenclature and classification of enzymes. Cofactors and Coenzymes. Concepts of active site and substrate specificity. Factors affecting the enzyme activity. Kinetics of single substrate enzymatic reactions. Competitive, non-competitive and irreversible enzyme inhibition. Mechanism of enzyme inhibition. Regulatory, allosteric, immobilized enzymes, zymogens, isoenzyme and multienzyme system.

RECOMMENDED BOOKS:

- 1. Principles of Biochemistry by Lehninger AL, Nelson DL and CoxMN,2000 Pub: worth Publishers
- 2. Biochemistry by Lubert Stryer (2006) Pub: Freeman and Company
- 3. Harpers Biochemistry, 27th ed. (2006) McGraw Hill Inc.
- 4. Lippincott's Biochemistry by champ c; Harvey.R.A and Ferrie. D .R. 3rd edition., Pub: J. B. Lippincott company