CORE PRACTICAL II

ENZYME KINETIC STUDIES

Sem	Sub. Code	Category	Lecture		Theory		Practical		Credits
			Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem	
II	21CPBC22	Core Practical	-	-	-	-	5	60	5

COURSE OBJECTIVE:

- Normally measuring enzyme activity is to determine the amount of enzyme present under defined conditions, so that activity can be compared with normal standard values.
- To establish importance of enzyme in disease conditions.

1. Subcellular fractionation of organelles from liver cells and identification by marker enzymes.

2. Activity of acid phosphatase

   a. Determination of optimum pH.

   b. Determination of optimum temperature.

   c. Determination of substrate concentration.

   d. Determination of specific activity.

3. Activity of alkaline phosphatase

   a. Determination of optimum pH.

   b. Determination of optimum temperature.

   c. Determination of substrate concentration.

   d. Determination of specific activity.

4. Determination of Enzyme activity of total ATPase.

5. Effect of activators and inhibitors on purified acid phosphatase activity.

6. Assay of clinically important enzymes

a. Assay of serum alkaline phosphatase activity.

b. Assay of Serum acid phosphatase activity.

c. Assay of Serum alanine aminotransferase activity.

d. Assay of Serum aspartate aminotransferase activity.

TEXT BOOKS:

S.NO	AUTHOR	TITLE	PUBLISHER	YEAR OF PUBLICATION
1	A. Sadasivam and A.Manickam	Biochemical techniques	New age international publishers,	2nd edition (2003).
2	J. Jayaraman	Laboratory manual in biochemistry	Wiley Eastern	1981
3.	David T.Plummer	An introduction to Practical Biochemistry	Tata McGraw-Hill Publishing Company Limited	3rd edition(1988)
4	Ramniksood	Medical laboratory Technology	Jaypee	6th edition(2006)

REFERENCE BOOKS:

S.NO	AUTHOR	TITLE	PUBLISHER	YEAR OF PUBLICATION
1.	H. Varley	Practical Clinical Biochemistry	CBS Publishers	4th edition(1988)

SYLLABUS DESIGNER:

- DrV.Prabha, Head & Assistant Professor of Bio-Chemistry.
- Mrs.G. Nithya, Assistant Professor of Bio-Chemistry.