

BTY301:BIOCHEMISTRY LABORATORY

L:0 T:0 P:2 Credits:1

Course Outcomes: Through this course students should be able to

CO1 :: understand the concept of pH and preparation of buffer solutions required for biochemical analysis

CO2 :: illustrate the basic theory and principle behind the given biochemical reactions

CO3 :: assess the fitness of the standard curve and its application in determination of concentration

CO4 :: estimate the concentration of different biomolecules and enzyme assay in the given sample

List of Practicals / Experiments:

Preparation of buffers

- Buffer preparation with concept of molarity and normality

Qualitative tests

- Qualitative tests for carbohydrates, amino acids and proteins

Quantitative tests

- Determination of carbohydrates by Dubois method
- Determination of total proteins by Lowry's method.
- Determination of blood glucose by glucose oxidase method

Determination of acid value and ascorbic acid content

- Determination of acid value of fat
- Determination of ascorbic acid content in fruit juice

Determination of antioxidant activity

- Determination of total antioxidant activity of food sample
- Demonstration of thin layer chromatography

Determination of enzyme activity

- Determination of salivary amylase enzyme activity

References:

1. INTRODUCTORY PRACTICAL BIOCHEMISTRY by S. K. SAWHNEY AND R. SINGH, NAROSA PUBLISHING HOUSE