

BS (4 Years) for Affiliated Colleges



Code	Subject Title	Cr. Hrs	Semester
CHEM-421	Biochemistry (Sp. Practical)	2	VII
Year	Discipline		
4	Chemistry		

SYLLABUS OUTLINE:

1. **Enzymes:**

Isolation of enzyme from different sources, study of different factors like temperature, pH, Concentration of substrate on the properties of Alkaline Phosphatase and LDH. Determination of the kinetic parameters of these enzymes and their mode of inhibition using UV/Visible Spectrophotometer.

2. **Vitamins:**

Estimation of Vitamin A, B1, B2, C and D in food materials by chemical methods and HPLC.

3. **Urine Analysis:**

Analysis of organic constituents in normal and abnormal human urine.

4. **Blood Analysis:**

Analysis of blood constituent like, Calcium, Phosphate, Sugar, Urea, creatine, Biliurubin, Cholesterol, Triglycerides by chemical methods, flame photometry and atomic absorption spectroscopy.

RECOMMENDED BOOKS:

1. Modern Experimental Biochemistry by R. F. Boyer 3rd ed, 2000, Pub: Pearson Education Inc.
2. Practical clinical Biochemistry by Varley. Pub: CBS publisher
3. An Introduction to Practical Biochemistry By D. T. Plummer 3rd ed. (1987)
Pub: McGraw Hill