

BS (4 Years) for Affiliated Colleges



Code	Subject Title	Cr. Hrs	Semester
CHEM-405	Physical Chemistry (Sp. Practical)	2	VII
Year	Discipline		
4	Chemistry		

SYLLABUS OUTLINE:

- 1. Molecular Mass Determination of different Polymers by Viscosity measurement.**
- 2. Thermo-chemical measurements**
 - Heat of solution of a salt by solubility methods.
 - Heat of precipitation.
- 3. Colloidal State:**

Preparation of As₂S₃ sol, and comparison of precipitating powers of different cations.
- 4. Spectrophotometry:**
 - Determination of percentage composition of two coloured components in solution.
 - Study of kinetics of iodination of acetone and decomposition of benzene diazonium chloride.
 - Predicting normal modes of vibration for simple molecules and interpretation of their IR Spectra.

RECOMMENDED BOOKS:

- Advanced Experimental Physical Chemistry by Ayodhya Sing.
- Experimental Physical Chemistry by Daniel
- Experimental Physical Chemistry by G.Peter Matthews.
- Experiments in Physical Chemistry by Shoemaker