PHYSICAL CHEMISTRY (BS-ADP 7thSemester)

Module Code: Chem-406

Module title: Physical Chemistry Lab - III

Name of Scheme: BS-ADP 7thSemester Department: School of Chemistry

Faculty: Science
Module Type: Compulsory
Module Rating: 1 credit

OBJECTIVES

This lab course will be highly helpful for students to learn about optical activity of organic compounds, analysis of IR spectra of simple organic molecules and use of refractive index for different purposes.

SYLLABUS OUTLINES

- 1. Predicting normal modes of vibration for simple molecules and interpretation of their IR Spectra.
- 2. Determination of specific rotation and molar rotation of optically active substances (sucrose and glucose).
- 3. Determination of wavelength of maximum absorption of various colored substances.
- 4. Determination of Dissociation Constant of an Acid by Spectrophotometric Method.
- 5. Determination of specific refraction and molar refraction of binary solutions.

RECOMMENDED BOOKS

- 1. Advanced Experimental Physical Chemistry by Ayodhya Sing.
- 2. Experimental Physical Chemistry by Daniel
- 3. Experimental Physical Chemistry by G.Peter Mattews.
- 4. Experiments in Physical Chemistry by Shoemaker.