## PHYSICAL CHEMISTRY (BS-ADP 7<sup>th</sup>Semester)

Module Code: Chem-402

Module title: Physical Chemistry Lab - I

Name of Scheme: BS-ADP 7<sup>th</sup>Semester Department: School of Chemistry

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

## **OBJECTIVES**

Students will be trained to carry out laboratory work using various techniques including filtration, solvent extraction, spectrophotometric and conducto-metric methodologies.

## SYLLABUS OUTLINES

- 1. Verification of Freundlich adsorption isotherm for Adsorption of acetic acid on active charcoal.
- 2. Determination of Critical micelle concentration of various ionic surfactants in water.
- 3. Determination of the partition coefficient of benzoic acid between organic solvent and water.
- 4. Determination of the partition coefficient of iodine between CCl<sub>4</sub> and H<sub>2</sub>O.
- 5. Preparation of silver sol and its characterization by UV Visible spectroscopy.

## **RECOMMENDED BOOKS**

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