## ICP 457: ORGANIC CHEMISTRY PRACTICALS-II

## **Course Outcomes:**

• Quantitative determination of small molecules, biomolecules and functional groups.

Quantitative determination of sugars, amino acids, phenols, carboxylic acids, amides, esters, aldehydes, ketones, urea by various methods. Determinations of acid and ester and acid and amide in mixtures of two.

• Determination of functional groups like hydroxyl, vic-hydroxyl, enol, amino, amide, unsaturation and nitro groups by various methods.

Any other interesting experiment.

## **References:**

- 1. Elementary Practical Organic Chemistry, Vol. II, quantitative Organic Analysis-A.I. Vogel
- 2. Experimetal Organic Chemistry, Vol. I &II, P.R. Singh, Tata McGraw-Hill, 1981.
- 3. Practical Organic Chemistry- IV Ed-Dey & Sitaraman, Allied, New Delhi, 1992.
- 4. Laboratory Experiments in Organic Chemistry-Adam, Johnson & Wicon, McMillan, 1979.
- 5. Experimental Organic Chemistry, H.D.Durst & G.E.Goke, McGraw-Hill, 1980
- 6. More Spectroscopic Problems in Organic Chemistry-A.J. Baker et al., Heyden, 1975.
- 7. Spectral Problems in Organic Chemistry, Davis & Wells, Chapman & Hall, 1984.
- 8. Elementary Practical organic chemistry, Part 2: Quantitative organic analysis by Arthur I. Vogel, 2<sup>nd</sup> Edition, CBS Publishers and distributors, 1987.
- 9. Organic analytical chemistry, Theory and Practice-Jag Mohan, Narosa, 2003.
- 10. Laboratory Manual of Organic Chemistry Raj K Bansal, 2<sup>nd</sup> Edition, Wiley, 1990.
- 11. Systematic Lab Experiments in Organic Chemistry-Arun Sethi, New age International, 2006.