Course Type	Course Code	Name of Course		Т	Р	Credit
DP	NCYC516	Organic Chemistry Lab – I		0	3	1.5

Course Objective

• Practically validate the theoretical knowledge acquired from the theory

Learning Outcomes

• Plan and Perform experiments and Interpret experimental results by correlation with theory

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1	Separation & Purification of organic mixture by extraction techniques. (3 expts.)	09	These experiments provide the knowledge of separation and purification of liquid compounds from a mixture.
2	Separation & Purification of binary organic mixture by Column chromatography. (3 expts.)	09	Students will learn a general purification technique which is routinely adopted in research laboratories to purify organic compounds.
3	Extraction & Separation of Organic compounds from plants: Marigold leaves, Spinach, etc. (3 expts.)	09	Students will learn how to extract organic components from natural plants (like, Ayurvedic herbs and spices with health benefits, or natural pigments).
4	Organic quantitative analysis: Estimation of i) acetone/ethyl alcohol & ii) phenol/aniline. (2 expts.)	06	These experiments help to acquire the technique of quantitative estimation of organic compounds.
5	Separation & Purification of organic compounds by crystallization/sublimation techniques. (2 expts.)	06	These experiments provide the knowledge of purification of solid compounds in analytical grade.
6	Characterization and identification of organic compounds by spectroscopic techniques.	03	This topic covers systematic procedure for structural elucidation of organic compounds with the help of spectroscopic techniques.
Total		42L	

Text Books:

 Vogel's Textbook of Practical Organic Chemistry revised-B. S. Furniss, A.J. Hannaford, P.W. G.Smith, A.R. Tatchell, 5thEdition, Addison Wesley Longman Limited, UK, 1997.

Reference Books:

- 1. Systematic Identification of Organic Compounds, A laboratory Manual, R.L. Shriner, R.C. Fuson and D.Y. Curtin, 6th edition Wiley, New York.
- 2. A Handbook of Quantitative & Qualitative Analysis- Arnold Heinemann, Clarke, H. T (1975).