

Course: Skill Enhancement (Semester 3)

Semester _____	3		
Paper Number	HCHSE3011P (100 MARKS)		
Paper Title	Analytical Methods in Chemistry-1		
No. of Credits	2		
Theory/Composite	Practical		
No. of periods assigned	Th: 0 Pr: 2		
Name of Faculty member(s)	Dr. Rahul Sharma Dr. Rina Ghosh Mr. Dipankar Das		
Course description/objective	<i>The students will get a flavour of some synthetic techniques and spectral characterization as well as some critical analysis.</i>		
Syllabus	<ol style="list-style-type: none">1. Preparation of fluorescein and study of the pH sensitivity of the absorption and fluorescence bands.2. Study of excited state energy transfer and electron transfer reactions – the pyrene excimer and exciplex (with dimethylaniline) formation.3. Column chromatographic separation of different organic compounds.4. Synthesis, purification and characterisation of different compounds involving coupling & condensation reactions.5. Determination of the isoelectric pH of amino acids like glycine and aspartic acid.6. Estimation of Calcium in milk by complexometric titration.		
T texts			
Reading/Reference Lists	<ol style="list-style-type: none">1. Bhattacharyya, R. C, <i>A Manual of Practical Chemistry</i>.2. Vogel, A. I. <i>Elementary Practical Organic Chemistry, Part 2: Qualitative Organic Analysis</i>, CBS Publishers and Distributors.3. Mann, F.G. & Saunders, B.C. <i>Practical Organic Chemistry</i>, Pearson Education (2009).4. Furniss, B.S., Hannaford, A.J., Smith, P.W.G., Tatchell, A.R. <i>Practical Organic Chemistry, 5th Ed.</i>, Pearson (2012).		
Evaluation	<table border="1"><tr><td>Practical: 100 marks <i>(Continuous Assessment)</i></td></tr><tr><td>Internal Assessment Exams: 80 Viva:15 Attendance: 5</td></tr></table>	Practical: 100 marks <i>(Continuous Assessment)</i>	Internal Assessment Exams: 80 Viva:15 Attendance: 5
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