



Integrated Bachelors & Masters Programmes  
B.Sc. Chemistry, Semester II

Course Code	IS02CCHE52	Title of the Course	Chemistry Practicals-II
Total Credits of the Course	1	Hours per Week	2 hrs

Course Objectives:	1. To understand and familiarize with basic laboratory skills in inorganic and organic chemistry practical. 2. To learn the methods for estimation of inorganic and organic species/ functionalities.
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Course Content		
Unit	Description	Weightage* (%)
1.	(1) Gravimetric analysis (silver). (2) Purity of iron. (3) Purity of copper. (4) Analysis of hardness of water. (5) Measurement of dissolved oxygen in water by iodometry. (6) Estimation of hydroxyl group. (7) Estimation of carboxyl acid group. (8) Estimation of ester group.	100

Teaching-Learning Methodology	Blends of the demonstrations of laboratory practicals and the classroom teaching, along with seminar/tutorials/PPT presentations/allotment and evaluation of assignments etc.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%





Course Outcomes: Having completed this course, the learner will be able to

1.	Work independently in the laboratory obeying good laboratory practices and safety norms
2.	Estimate purity of inorganic substances
3.	Estimate various functional groups present in organic compounds

Suggested References:

Sr. No.	References
1.	Vogel's Test book of Quantitative Chemical Analysis, 5 th Edition, G.H. Jeffery, J. Basset, J. Mendham, R.C. Denney.
2.	Vogel's Test book Of Qualitative Inorganic Analysis, G. Svehla.
3.	A text book of practical organic chemistry including organic qualitative analysis, A. I. Vogel, 3 <sup>rd</sup> Edition, Longman publication, 1974.
4.	Comprehensive Practical Organic Chemistry: Preparation and Quantitative Analysis, V.K. Ahluwalia, R. Aggarwal, University Press, 2000.
5.	A textbook on chemistry practical, B. C. Ray, S. Das, New Central Book Agency, 2014.

On-line resources to be used if available as reference material

On-line Resources: <https://swayam.gov.in/>

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