

DEPARTMENT OF CHEMISTRY
INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD, KERALA

COURSE & EVALUATION PLAN

1) **Course Code:** CY 1030 2) **Course Title:** Chemistry Practicals 3) **L-P-T:** 0-3-0 (2) 4) **Credit:** Two

5) **Pre-Requisite:** Nil 6) **Course Category:** B.Sc 7) **Teaching Department:** Chemistry

8) **Course For:** 2nd Semester B.Tech

9) Objectives of the Course:

To understand the principles of volumetric analysis in chemistry, exposure towards procedures such as weighing, preparation of standard solution, titration etc, knowing the principle of Instrumental methods of analysis.

10) **Course Coverage:** 12 Weeks

Schedule	Experiments	Schedule	Experiments
1 st week	Reaction Kinetics	7 th week	pH and Conductometry
2 nd week	Colorimetry and Spectrophotometry	8 th week	Gravimetric Analysis
3 rd week	Preparation of Copper - Oxalate Complex	9 th week	Halogen Addition to C=C Bond
4 th week	Aldol Condensation	10 th week	*****
5 th week	Separation of An Acid from a Neutral Compound by Base Extraction	11 th week	Theory Quiz Test
6 th week	Construction of Adsorption Isotherm	12 th Week	END – TERM LAB EXAM

11) Reference Books:

- Vogel's Text Book of Quantitative Chemical Analysis, Furnis et al. (ed) Pearson publication.
- Laboratory Manual for Engineering Chemistry, B B Patra, Pearson Education.
- Chemical Technicians Ready Reference Handbook, 5th Ed., J. Ballinger and G Shugar, McGraw-Hill Education.

12) Evaluation Plan

- Course is evaluated in 3 components: Continuous Evaluation, Theory Quiz Test and End Sem Lab Exam.
- The weightage for the three components are as follows:

Contineous Evaluation: 10 marks each for each practicals (9 * 10 = 90) + 10 internal assesment marks
Theory Quiz Test: 20 Marks
End Sem Lab Exam: 40 marks

c) As part of the continuous evaluation

- Nine experiments have to be performed and each experiment has to be written in the observation record. Each experiment will be **evaluated for 10 marks..**
- Observation Record will be evaluated for neatness and completeness.
- 10 marks internal is given for overall performance in the lab.

d) The Theory Quiz test and the End Sem Lab Exams for 20 and 40 marks respectively are scheduled as follows:

Theory Quiz Test: 11th Week (20 Marks)
End Sem Lab Exam: 12th Week (40 Marks)

e) The End-Sem test will be a lab performance test that includes all the 9 experiments in the course.