



Master of Science – Materials Science
(M.Sc.)(Materials Science) Semester –II

Course Code	PS02CMTS55	Title of the Course	PRACTICAL – II
Total Credits of the Course	4	Hours per Week	12 hrs

Course Objectives:	1. Analysis of different types of material
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Course Content		
Unit	Description	Weightage* (%)
1.	<p>Determination of percentage of nitrogen by Kjeldhal's method in the given sample</p> <p>Determination of Percentage of acetyl groups in the given sample</p> <p>Determination of Molecular weight by steam distillation method of the given sample</p> <p>Determination of Hydrolyzable chlorine content of resin.</p> <p>Determination of gel time, peak exotherm temp. using dynamic & isothermal curing processes for thermosets.</p> <p>Determination of Oxirane oxygen content & molecular wt of epoxy resin.</p> <p>Determination of Aluminium in the given solution</p> <p>Determination of Nickel in the given solution</p> <p>Determination of iron in FeCl₃ solution</p> <p>Determination of strength of silver in silver nitrates solution</p> <p>Determination of Calcium in the unknown solution</p> <p>Determination of chloride content in water.</p> <p>Determination of Hardness of water.</p> <p>Analysis of different constituents present in the given solution.</p> <p>Note -Experiments can be added or deleted depending upon current advancements.</p>	100%





Teaching-Learning Methodology	Demonstration/Group discussion/ Panel/Hands on training
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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.	Useful in the higher studies and industries
2.	
3.	

Suggested References:	
Sr. No.	References
1.	Denney, R. C., Vogel, A. I., & Mendham, J. (2006). <i>Vogel's textbook of quantitative chemical analysis/revised by J Mendham...[et al.]</i> . India: Pearson Education.
2.	Furniss, B. S. (2004). <i>Vogel's textbook of practical organic chemistry</i> . Pearson Education India.

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

