Master of Science – Nano Science & Nano Technology

(M.Sc.) (Nano Science & Nano Technology) Semester –II

Course Code	PS02CNST55	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

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

Teaching-Learning Methodology	Demonstration/Group discussion/ Panel/Hands on training

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). *Vogel's textbook of quantitative chemical analysis/revised by J Mendham...[et al.]*. India: Pearson Education.
2.	Furniss, B. S. (2004). *Vogel's textbook of practical organic chemistry*. Pearson Education India.

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

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