

Chemistry Lab

Course Code	23BS1151	Year	I	Semester	I
Course Category	Basic Sciences	Branch	ECE	Course Type	Lab
Credits	1	L-T-P	0-0-2	Prerequisites	Nil
Continuous Internal Evaluation:	30	Semester End Evaluation:	70	Total Marks:	100

Course Outcomes	
Upon successful completion of the course, the student will be able to	
CO1	Demonstrate the working of potentiometer and conductometer instruments.L3
CO2	Prepare advanced materials like polymers and Nano materials L3
CO3	Calculate the strength of Pb-Acid battery L4
CO4	Examine the ferrous iron content in a sample using dichrometry L4
CO5	Calculate the wave length of a sample using UV-Visible Spectroscopy and colorimetry L4

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:High, 2: Medium, 1:Low)														
	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO1	3													
CO2	3													
CO3		3												
CO4		3												
CO5		3												

Syllabus		
Exp. No.	Contents	Mapped CO
Experiments		
1	Conductometric titration of strong acid vs strong base	CO-1
2	Conductometric titration of weak acid vs. strong base	CO-1
3	Determination of cell constant and conductance of solutions	CO-1
4	Potentiometry - determination of redox potentials and emfs	CO-1
5	Determination of Strength of an acid in Pb-Acid battery	CO-3
6	Preparation of a Bakelite	CO-2
7	Verify Lambert-Beer's law	CO-5
8	Wavelength measurement of sample through UV-Visible Spectroscopy	CO-5
9	Preparation of nanomaterials by precipitation method	CO-2
10	Estimation of Ferrous Iron by Dichrometry	CO-4

Learning Resources
J. Mendham, R.C. Denney, J.D. Barnes and B. Sivasankar, Vogel's Quantitative Chemical

Analysis, 6th Ed., Pearson Publications