

CHEMISTRY LAB
(Common to EEE, ECE,CSE)

Course Code	23BS1151	Year	I	Semester	I
Course Category	Basic Sciences	Branch	CSE	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 by using UV-Visible Spectroscopy and colorimetry (L4)

Syllabus		
Exp. No.	Contents	Mapped CO
Experiments		
1	Conductometric titration of strong acid vs strong base	CO1
2	Conductometric titration of weak acid vs. strong base	CO1
3	Determination of cell constant and conductance of solutions	CO1
4	Potentiometry - determination of redox potentials and emfs	CO1
5	Determination of Strength of an acid in Pb-Acid battery	CO3
6	Preparation of a Bakelite	CO2
7	Verify Lambert-Beer's law	CO5
8	Wavelength measurement of sample through UV-Visible Spectroscopy	CO5
9	Preparation of nanomaterials by precipitation method	CO2
10	Estimation of Ferrous Iron by Dichrometry	CO4

Learning Resources
Reference: • "Vogel's Quantitative Chemical Analysis 6th Edition " Pearson Publications by J.Mendham, R.C.Denney, J.D.Barnes and B. Sivasankar