

CHEMISTRY LAB

Course Code	23BS1251	Year	I	Semester	II
Course Category	Basic Sciences	Branch	IT	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)
CO6	Make an effective report based on the experiments.

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	PO 9	PO1 0	PO11	PO1 2	PSO 1	PSO 2
CO 1	3			3								3		
CO2	3			3								3		
CO3	3			3								3		
CO4	3			3								3		
CO5	3			3								3		
CO 6									3	3		3		

Syllabus		
Exp. No.	Contents	Mapped CO
Experiments		
1	Conductometric titration of strong acid vs strong base	CO1,CO6
2	Conductometric titration of weak acid vs. strong base	CO1,CO6
3	Determination of cell constant and conductance of solutions	CO1,CO6
4	Potentiometry - determination of redox potentials and emfs	CO1, CO6
5	Determination of Strength of an acid in Pb-Acid battery	CO3,CO6
6	Preparation of a Bakelite	CO2,CO6
7	Verify Lambert-Beer's law	CO5,CO6
8	Wavelength measurement of sample through UV-Visible Spectroscopy	CO5,CO6
9	Preparation of nanomaterials by precipitation method	CO2,CO6
10	Estimation of Ferrous Iron by Dichrometry	CO4,CO6

Learning Resources

Reference:

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