CHEMISTRY LAB
(Common to IT,CSE-AIML,CSE-DS)

Course Code	23BS1251	Year	I	Semester	II
Course Category	Basic Sciences	Branch	CSE (DS)	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)

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**	**PSO1**	**PSO2**
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	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
References: • "Vogel's Quantitative Chemical Analysis 6th Edition " Pearson Publications by J. Mendham, R.C.Denney, J.D.Barnes and B. Sivasankar