Engineering Chemistry Lab

Course Code	20BS1251	Year	I	Semester	II
Course Category	Basic Science	Branch	CSE	Course Type	Lab
Credits	1.5	L-T-P	0-0-3	Prerequisites	Nil
Continuous Internal Evaluation	15	Semester End Evaluation	35	Total Marks	50

Course Outcomes

Upon successful completion of the course, the student will be able to

CO1	Demonstrate the working of instruments such as pH meter and Conduct meter.(L3)
CO2	Apply the acquired knowledge to determine the quantity of metal ions in a given solution(L3)
CO3	Estimate the amount of active chlorine in bleaching powder.(L4)
CO4	Compare the viscosities and surface tension of different liquids(L4)
CO5	Analyze different compounds and examine the preparation of different polymers (L4)
CO6	Make an effective report based on experiments

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:High, 2: Medium, 1:Low)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3		1				3						1	
CO2	3		1				3						1	
CO3	3		1				3						1	
CO4	3		1				3						1	
CO5	3		1				3						1	
CO6	3		1				3			3			1	

Syllabus

Expt. No.	Syllabus	Mapped CO's
1	Determination of strength of an acid by pH metric method	CO1,CO6
2	Determination of conductance by conducto metric method	CO1,CO6
3	Determination of viscosity of a liquid	CO4,CO6
4	Determination of surface tension of a liquid	CO4,CO6
5	Determination of chromium (VI) in potassium dichromate	CO2,CO6
6	Determination of Zinc by EDTA method	CO2,CO6
7	Estimation of active chlorine content in Bleaching powder	CO3,CO6
8	Preparation of Phenol-Formaldehyde resin	CO5,CO6
9	Preparation of Urea-Formaldehyde resin	CO5,CO6
10	Thin layer chromatography(paper chromatography)	

Learning Resources

Text Books

1. N.KBhasin and Sudha Rani Laboratory Manual on Engineering Chemistry 3/e, DhanpatRai Publishing Company (2007).

Reference Books

1. Mendham J, Denney RC, Barnes JD, Thosmas M and Sivasankar B Vogel's Quantitative Chemical Analysis 6/e, Pearson publishers (2000).

e- Resources & other digital material

1. https://nptel.ac.in/courses/105105178/
2. http://202.53.81.118/course/view.php?id=82