



SWARNANDHRA
College of Engineering & Technology (Autonomous)
NARSAPUR-534280

DEPARTMENT OF BASIC SCIENCES AND HUMANITIES
LAB LESSON PLAN

Course Code	Course Name	Regulation	Academic year	Year / Semester	Branches	Contact Periods/Week
23BS2L03	Engineering Chemistry Lab	R-23	2023-2024	I B.Tech/ II Sem	Common to CIVIL, MECHANICAL & ROBOTICS	3

COURSE OUTCOMES

At the end of the course, student will be able to

CO1: Calculate the hardness of water. (K3)

CO2: Determine the cell constant and P^H of solutions. (K3) CO3:

Prepare advanced polymer materials. (K3)

CO4: Determine the physical properties like viscosity. (K4)

CO5: Determine pour point, cloud point, flash point and fire point. (K3)

WEEK	COURSE OUTCOMES	EXPT NO	DESCRIPTION	NO. OF SESSIONS
1, 2	CO1 Calculate the hardness of water. (K3)	1	Determination of Hardness of a ground water sample	1
		2	Estimation of Dissolved Oxygen by Winkler's method	1
3, 4	CO2 Determine the cell constant and PH of solutions. (K3)	3	Determination of strength of an acid in Pb-acid battery	1
		4	Determination of pH of soft drink	1
5, 6, 7	CO3 Prepare advanced polymer materials. (K3)	5	Preparation of a polymer (Bakelite)	1
		6	Preparation of Nano materials by precipitation method	1
		7	Determination of percentage Moisture content in a coal sample	1
8, 9	CO4 Determine the physical properties like viscosity. (K4)	8	Determination of Viscosity of lubricating oil by Redwood Viscometer 1	1
		9	Determination of Viscosity of lubricating oil by Redwood Viscometer 2	1
10, 11	CO5 Determine pour point, cloud point, flash point & fire point. (K3)	10	Determination of pour and cloud point of lubricating oils	1
		11	Determination of flash and fire point of lubricating oils	1
CUMULATIVE PROPOSED SESSIONS				11
LAB INTERNAL EXAM				
LAB END EXAMINATION				
S.NO		Faculty Name	Signature with Date	
1	Faculty I (for common Course)	Mrs.K. Janaki	K.J. 31/11/25	
2	Course Coordinator	Mr.K.SrinivasaRao	K.S. 31/11/25	
3	Programme Coordinator	Dr. V.Swaminadham	V.S. 31/11/25	

(Signature)
Principal