



DEPARTMENT OF BASIC SCIENCES AND HUMANITIES

LAB LESSON PLAN

Course Code	Course Name	Regulation	Academic year	Year / Semester	Branches	Contact Periods/Week	Sections
23BS2L02	Engineering Physics Lab	R-23	2024- 2025	I B.Tech / II Sem	Common to EEE,CSE,CSE-DS, CSE-CS,CSE-BS,	3	

COURSE OUTCOMES

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

CO1: Demonstrate the basic knowledge to know the frequency of a vibrator, hall coefficient. (K3)

CO2: Attain knowledge to verify some of the properties of physical optics. (K4)

CO3: Develop skills to plot various characteristic curves and to calculate the physical Properties of given materials. (K4)

CO4: Calculate some of the properties of semiconducting materials. (K2)

WEEK	COURSE OUTCOMES	EXPT NO	DESCRIPTION	NO. OF SESSIONS
1,2	CO1: Demonstrate basic knowledge to know the frequency of a vibrator, hall coefficient	1	Determine frequency of A.C. supply by using Sonometer	1
		2	Determine Frequency of given electrically driven tuning fork in Transverse and Longitudinal modes by using Melde's apparatus	1
3,4,5	CO2: Attain knowledge to verify some of the properties of physical optics	3	Determine Planck's constant by using photo cell	1
		4	Determine the wavelength of Laser using diffraction grating	1

		5	Determination of Numerical Aperture and Acceptance angle of an Optical Fiber	1
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WEEK	COURSE OUTCOMES	EXPT NO	DESCRIPTION	NO. OF SESSIONS
6,7,8,9	CO3. Develop skills to plot various characteristic curves and to calculate the physical properties of given materials	6	Determine temperature coefficient of a given Thermistor by using its characteristic curves	1
		7	Study the variation of Intensity of Magnetic Field along the axis of a circular coil carrying current by using Stewart-Gee's Apparatus	1
		8	Determine Time constant of a C-R circuit	1
		9	Draw V-I characteristics of a Zener diode in forward and reverse bias. And also find its breakdown voltage	1
10	CO4. Calculate some of the properties of semiconducting materials	10	Determine the energy band gap of a given semiconducting material by using p-n junction diode	1


Course Coordinator


HOD


Principal



SWARNANDHRA
COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC
With "A" Grade – 3.32/4.00 CGPA, Recognized Under 2(f) & 12(B) of UGC Act 1956
Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK., Kakinada
Seetharampuram, W.G.DT., Narsapur – 534280, (Andhra Pradesh)

		Name	Signature with Date
i.	Faculty I (for common Course)	Dr. V. Swaminadham	V. Swaminadham
ii.	Faculty II (for common Course)	Dr. N.G. Praveena	N.G. Praveena
iii.	Faculty III (for common Course)	Dr. K.Ramanjaneyulu	K. Ramanjaneyulu
iv.	Faculty IV (for common Course)	Dr. S.Saravanan	S. Saravanan
v.	Faculty V (for common Course)	Mr. K.Koteswara Rao	K. Koteswara Rao
vi.	Faculty VI (for common Course)	Mr.K.N.V.Narasimha Rao	K.N.V. Narasimha Rao
vii.	Faculty VII (for common Course)	Mrs. T.Charitha	T. Charitha
viii.	Course Coordinator	Dr. N.G. Praveena	N.G. Praveena
ix.	Module Coordinator	NA	
x.	Programme Coordinator	Dr. V. Swaminadham	V. Swaminadham


Principal