

22PYP01 - PHYSICS LABORATORY (Common to All Branches)				
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		0	0	2
PRE REQUISITE : NIL				
Course Objective:	- To infer the practical knowledge by applying the experimental methods to correlate with the Physics theory. - To introduce different experiments to test basics of physics concepts applied in optics and electronics			
Course Outcomes		Cognitive Level		
The Student will be able to				
CO1	Examine the effects of material type and loading conditions on the results of the non-uniform bending experiment.	An		
CO2	Utilize principles of light interaction to determine the particle size of materials using laser diffraction techniques.	Ap		
CO3	Evaluate the accuracy of the wavelength of different colors with the accepted values in the literature	E		
CO4	Measure the effectiveness of the solar cell based on its V-I characteristics.	E		
CO5	Analyze the principles underlying the Air wedge method for the determination of the thickness of a thin wire,	An		

LIST OF EXPERIMENTS
1. Determination of Young's modulus by non-uniform bending method
2. Determination of (a) wavelength and (b) particle size using Laser.
3. Determination of thermal conductivity of a bad conductor – Lee's Disc method.
4. Determination of wavelength of mercury spectrum – spectrometer grating
5. Determination of band gap of a semiconductor.
6. Determination of thickness of a thin wire – Air wedge method.
7. Determination of V-I characteristics of solar cell.

Mapping of COs with POs / PSOs														
COs	POs												PSOs	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
1	3	3												
2	3											2		
3	3	3												
4	3											2		
5	3	3											1	1
CO (w.a)	3	3										2	1	1



• Ratified by Eleventh Academic Council