LABORATORY EXPERIMENTS IN ENGINEERING PHYSICS

Sub Code	**:**	**10PHYL17/10PHYL27**	**IA Marks**	**:**	**25**
Hrs/ Week	**:**	**03**	**Exam Hours**	**:**	**03**
Total Hrs.	**:**	**10 (To be completed)**	**Exam Marks**	**:**	**50**

EXPERIMENTS :

1. Series & Parallel LCR Circuits.(Determination of resonant frequency & quality factor)
2. I-V Characteristics of Zener Diode.(determination of knee voltage, zener voltage & forward resistance)
3. Characteristics of a Transistor.(Study of Input & Output characteristics and calculation of input resistance, output resistance & amplification factor)
4. Photo Diode Characteristics.(Study of I-V characteristics in reverse bias and variation of photocurrent as a function of reverse voltage & intensity)
5. Ultrasonic Interferometer (Measurement of velocity of sounds in solids/liquids).
6. Dielectric constant (Measurement of dielectric constant).
7. Magnetic properties (Study of retentivity and coercivity by B-H graph method).
8. Diffraction (Measurement of wavelength of laser / Hg source using diffraction grating).
9. Planck's constant (Using the principle of photoelectric effect/LED's).
10. Electrical Resistivity (Determination of resistivity in semiconductor by Four probe method).
11. Verification of Stefan's law.
12. Determination of Fermi energy.(Measurement of Fermi energy in copper)
13. Uniform Bending Experiment.(Determination of Youngs modulus of material bar)
14. Newtons Rings.(Determination of radius of curvature of planoconvex lens)

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H.O.D.
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