

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF CIVIL ENGINEERING

I Year - I Semester		L	T	P	C
		0	0	3	1.5
ENGINEERING PHYSICS LAB (BSC1103)					
(For All Non-Circuital Branches like ME, CE, Chemical etc)					

(Any 10 of the following listed experiments)

List of Engineering Physics Experiments

- 1. Laser: Determination of wavelength using diffraction grating.
- 1. Young's modulus of given material by Strain gauge method.
- 2. Study of variation of magnetic field along the axis of a current carrying circular coil by Stewart & Gee's method.
- 3. Determination of ultrasonic velocity in given liquid (Acoustic grating).
- 4. Determination of dielectric constant using charging and discharging method.
- 5. Study the variation of B versus H by magnetizing the magnetic material (B-H curve).
- 6. Estimation of Planck's constant using photoelectric effect.
- 7. Rigidity modulus of material of a wire-dynamic method (Torsional pendulum).
- 8. Determination of numerical aperture and acceptance angle of an optical fiber.
- 9. Determination of thickness of thin object by wedge method.
- 10. Determination of radius of curvature of given plano convex lens by Newton's rings.
- 11. Determination of wavelengths of different spectral lines in mercury spectrum using diffraction grating in normal incidence configuration.
- 12. Determination of dispersive power of the prism.
- 13. Sonometer: Verification of laws of string.
- 14. Measurement of magnetic susceptibility by Kundt's tube method.

References:

1. S. Balasubramanian, M.N. Srinivasan "A Text book of Practical Physics" - S Chand Publishers, 2017.