

# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA

## KAKINADA - 533 003, Andhra Pradesh, India

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Any 10 of the following listed experiments)

I Year - II Semester		L	T	P	C
		0	0	3	1.5
APPLIED PHYSICS LABORATORY					

### List of Applied Physics Experiments

- 1. Determination of thickness of thin object by wedgemethod.
- 2. Determination of radius of curvature of a given plano convex lens by Newton's rings.
- 3. Determination of wavelengths of different spectral lines in mercury spectrum using diffraction grating in normal incidence configuration.
- 4. Determination of dispersive power of theprism.
- 5. Determination of dielectric constant using charging and dischargingmethod.
- 6. Study the variation of B versus H by magnetizing the magnetic material (B-Hcurve).
- 7. Determination of numerical aperture and acceptance angle of an optical fiber.
- 8. Determination of wavelength of Laser light using diffractiongrating.
- 9. Estimation of Planck's constant using photoelectriceffect.
- 10. Determination of the resistivity of semiconductor by four probemethod.
- 11. To determine the energy gap of a semiconductor using p-n junctiondiode.
- 12. Magnetic field along the axis of a current carrying circular coil by Stewart & Gee's Method
- 13. Determination of Hall voltage and Hall coefficient of a given semiconductor using Hall Effect.
- 14. Measurement of resistance of a semiconductor with varying temperature.
- 15. Resistivity of a Superconductor using four probe method & Meissnereffect.

#### References:

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