# 19SH11P2 - APPLIED PHYSICS LABORATORY

**(Common to EEE, ECE, CSE & IT)**

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| Course Category: | Basic Science | Credits: | 1.5 |
| Course Type: | Practical | Lecture-Tutorial-Practical: | 0-0-3 |
| Prerequisite: | Engineering Physics | Sessional Evaluation:  Univ. Exam Evaluation:  Total Marks: | 40  60  100 |
| Objectives: | Students undergoing this course are expected to:  Learn about some important experimental techniques in physics with knowledge in theoretical aspects so that they can excel in that particular field. | | |

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| **Course Outcomes** | CO1 | These experiments in the laboratory are helpful in understanding important concepts of physics through involvement in the experiments by applying theoretical knowledge. |
| CO2 | It helps to recognize where the ideas of the students agree with those accepted by physics and where they do not. |
| Course Content | LIST OF EXPERIMENTS   1. Determination of rigidity modulus of wire material – Torsional pendulum. 2. Melde’s experiment – Transverse & longitudinal modes. 3. Resonance in LCR circuit. 4. Magnetic field along the axis of a coil (Stewart – Gee’s Method). 5. Study of characteristics of LED 6. Newton rings 7. Wedge method 8. Diffraction grating - Wavelength of given source. 9. Dispersive power of prism material using spectrometer. 10. P-N- junction diode characteristics. 11. Evaluation of Numerical Aperture of given optical fiber. 12. Energy gap of a P-N junction diode material. 13. Transistor characteristics. 14. Solar cell characteristics. 15. Logic gates. | |