# 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: | 4060100 |
| 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 EXPERIMENTS1. 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.
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