

<b>2018-19 Onwards (MR-18)</b>	<b>MALLA REDDY ENGINEERING COLLEGE (Autonomous)</b>	<b>B.Tech. II Semester</b>		
<b>Code: 80B08</b>	<b>Engineering Physics Lab (Common to CE, ME and Min.Engg)</b>	<b>L</b>	<b>T</b>	<b>P</b>
<b>Credits: 1</b>		-	-	<b>2</b>

**Course objective:**

The main objective of this course is to provide the necessary exposure to the practical aspects, which is an essential component for learning science.

**List of Experiments:**

- 1 Melde's Experiment – Longitudinal and Transverse modes.**  
To determine frequency of electrically maintain Tuning fork using Melde's apparatus
- 2 RLC series circuit :**  
To determination of resonant frequency, bandwidth and quality factor.
- 3 Newton's Rings Experiment**  
To determine the wavelength of Monochromatic light using Newton's Ring's Experiment.
- 4 Numerical Aperture of an Optical Fiber**  
To determine the Numerical aperture of the given fiber
- 5 Bending loss of the given fiber.**  
To determine the bending loss of the given fiber.
- 6 Diffraction grating**  
To determination of the wavelength of Sodium vapour lamp.
- 7 B-H Curve.**  
To study the Magnetization of Ferro magnetic material in presence of magnetic field
- 8 Dispersive Power:**  
To determine the dispersive power of glass prism
- 9 LASER**  
To determination of pitch of the screw gauge using LASER.
- 10 Michelson interferometer (Demonstration only)**  
To observe the Optical interference pattern.

**Course Outcomes:**

On Completion of this course, students are able to:

1. Develop skills to impart practical knowledge in real time solution.
2. Understand principle, concept, working, application and comparison of results with theoretical calculations.
3. Design new instruments with practical knowledge.

4. Understand measurement technology, usage of new instruments and real time applications in engineering studies.