

**Parvatibai Chowgule College of Arts and Science
(Autonomous)**

2019-20

	<p>CO3 : Understand the working of transient circuits and alternating current circuits.</p> <p>CO4 : Correlate the theoretical basis of various concepts of electricity and magnetism while performing experiments.</p>
Electromagnetic Theory – I	<p>CO1: Apply vector calculus to understand concepts in electrostatics.</p> <p>CO2: Comprehend the interaction between charges in vacuum as well as in medium.</p> <p>CO3: Calculate the electric field and electrical potential for discrete charges and continuous distribution of charge.</p> <p>CO4: Apply suitable techniques to solve various electrostatic problems.</p> <p>CO5: Understand how ferroelectric materials can be used as memory devices.</p>
Optics	<p>CO1 : Understand the image formation for various optical systems.</p> <p>CO2 : Differentiate between optical phenomena like Interference, Diffraction and Polarization.</p> <p>CO3 : Correlate the theoretical basis of various concepts of Geometrical Optics and Physical Optics while performing experiments</p> <p>CO4 : Develop understanding towards the different phenomena exhibited by light.</p>
Oscillations, Waves and Sound	<p>CO1 : Set up an equation of motion for simple harmonic motion and obtain its solution.</p> <p>CO2 : Explain how superposition of waves leads to different Lissajous figures.</p> <p>CO3 : Set and solve the equation of motion for damped and driven damped harmonic oscillators and analyse the nature of oscillations.</p> <p>CO4: Understand the dependence of velocity of sound waves on various factors like temperature, pressure, density, humidity.</p> <p>CO5: Solve problems for different cases of Doppler effect.</p>
Instrumentation	<p>CO1 : Understand basic concepts related to the various types of measuring instruments and measuring techniques.</p> <p>CO2 : Comprehend basic principles involved in measuring</p>

