

TOPIC	Content	LEARNING OBJECTIVES
Mathematical Tools	Binomial theorem , integral calculus, differential calculus, trigonometry	<b>Students will be able to apply all the mathematical tools in solving numericals.</b>
Current Electricity	<p>1) Electric current, flow of electric charges in a metallic conductor, Ohm's law, electrical resistance, V-I characteristics (linear and non- linear)</p> <p>2. electrical energy and power, electrical resistivity and conductivity, Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors; temperature dependence of resistance.</p>	<p>To make the learners to understand the concept Electricity, resistance and resistivity and the parameters affecting it with its link to our daily life.</p> <p>Students are able to understand the concept of Potential difference and current and also the process of finding the unknown current in a loop using KVL and KCL.</p> <p>Students will be able to understand the practical application of resistors and cells and its different combination in real life</p>
MAGNETISM	To provide students with knowledge of Enhance ability to accurately recognize and use appropriate terminology related to magnetic effect due to moving charge To make students able to research on common examples of magnetic effect of current and magnetism.	Students would be able to Understand and differentiate between magnetic effect of current and magnetism

OPTICS	To provide students with knowledge of Enhance ability to accurately recognize and use appropriate terminology related to visible light	Students would be able to Understand and differentiate between ray and wave nature of light
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