

# PHYSICS CLASS X (CRASH COURSE ICSE)

SL.NO.	CHAPTERS	TIME PERIOD
<b>1</b>	<p><b><u>Force, Work, Power and Energy</u></b></p> <ul style="list-style-type: none"> <li>• Turning forces concept; moment of a force; forces in equilibrium; centre of gravity.</li> <li>• Work, energy, power and their relation with force.</li> <li>• Different types of energy.</li> <li>• Machines as force multipliers.</li> <li>• Principle of Conservation of energy.</li> </ul>	<b>AS PER REQUIREMENT TO COMPLETE IMPORTANT TOPICS</b>
<b>2</b>	<p><b><u>Light</u></b></p> <ul style="list-style-type: none"> <li>• Refraction of light through a glass block and a triangular prism.</li> <li>• Total internal reflection</li> <li>• Lenses (converging and diverging) including characteristics of the images formed (using ray diagrams only).</li> <li>• Using a triangular prism to produce a visible spectrum from white light; Electromagnetic spectrum.</li> </ul>	
<b>3</b>	<p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>• Reflection of Sound Waves; echoes: their use; simple numerical problems on echoes.</li> <li>• Natural vibrations, Damped vibrations, Forced vibrations and Resonance - a special case of forced vibrations.</li> <li>• Loudness, pitch and quality of sound.</li> </ul>	
<b>4</b>	<p><b><u>Electricity and Magnetism</u></b></p> <ul style="list-style-type: none"> <li>• Ohm's Law; concepts of emf, potential difference, resistance; resistances in series and parallel, internal resistance.</li> <li>• Electrical power and energy.</li> <li>• Household circuits</li> <li>• Magnetic effect of a current (principles only, statement of laws not required); electromagnetic induction (elementary).</li> </ul>	
<b>5</b>	<p><b><u>Heat</u></b></p> <ul style="list-style-type: none"> <li>• Calorimetry: meaning, specific heat capacity; principle of method of mixtures; Numerical Problems on specific</li> </ul>	

	heat capacity using heat loss and gain and the method of mixtures. <ul style="list-style-type: none"><li>• Latent heat; loss and gain of heat involving change of state for fusion only.</li></ul>	
<b>6</b>	<b><u>Modern Physics</u></b> <ul style="list-style-type: none"><li>• Radioactivity and changes in the nucleus; background radiation and safety precautions</li></ul>	