Appendix - C

Information Schedule of Physics

Name of the school: **Roll No:**

Instructions: Put a tick mark (√) against the content areas in the given topic which you found difficult to understand in physics in standard IX.

Sr. No	Topic	Content Area	Put a tick mark
1.	**Motion**	• Concept of distance and displacement	
		• Uniform Motion	
		• Non –Uniform motion	
		• Measuring Rate of Motion: Concept of Speed	
		• Speed with Direction :Concept of Velocity	
		• Rate of change of Velocity :Concept of Acceleration and Retardation	
		• Graphical Representation of Motion	
		• Distance Time Graphs	
		• Velocity Time Graph	
		• Derivations of Equations of Motion by Graphical Method	
		• Equation for Velocity – Time Relation	
		• Equation for Position – Time Relation	
		• Equation for Position – Velocity Relation	
		• Uniform Circular Motion	
		• Numerical on Motion	
2	**Force And Laws of Motion**	• Concept of Force	
		• Balanced and Unbalanced Forces	
		• Galileo's Observations and Conclusions	
		• Newton's First Law of Motion	
		• Newton's First Law & Force	
		• Newton's First Law and Inertia	

		• Inertia and Mass	
		• Types of Inertia	
		• Linear Momentum	
		• Newton's Second Law of Motion	
		• Mathematical Formulation of Newton's Second Law of Motion	
		• Applications of Newton's Second Law	
		• Newton's Third Law of Motion	
		• Applications of Newton's Third Law of Motion	
		• Law of Conservation of Momentum	
		• Derivation of Law of Conservation of Momentum	
		• Applications of the Law of Conservation of Momentum	
		• Numerical Based on Force and Laws of Motion	
3	**Gravitation**	• Concept of Gravitation	
		• Newton's Universal Law of Gravitation	
		• Unit and Value of Gravitational Constant	
		• Importance of Universal Law of Gravitation	
		• Gravitational Force between Light Objects and Heavy Objects	
		• Gravitation and Newton's Third Law of Motion	
		• Gravity	
		• Concept of Acceleration due to Gravity: Free Fall	
		• Relation between g and G	
		• Value of acceleration due to Gravity (g)	
		• Acceleration due to Gravity does not	

		depend on Mass of the Body	
		• Variation in Acceleration due to gravity	
		• Motion of Objects under the influence of Gravitational Force of Earth	
		• Mass	
		• Weight	
		• Weight of an object on Moon	
		• Numerical on Gravitation	
		• Thrust and Pressure	
		• Density	
		• Relative Density	
		• Pressure in Fluids	
		• Buoyancy	
		• Why Objects Float or Sink in Water	
		• Archimedes' Principle	
		• Numerical on Buoyancy and Archimedes' Principal	
4	**Work And Energy**	• Concept of Work	
		• Work done by a Constant Force	
		• Energy	
		• Kinetic Energy	
		• Expression for Kinetic Energy	
		• Potential Energy	
		• Potential Energy of an Object at a Height	
		• Forms of Energy	
		• Energy Transformations	
		• Law of Conservation of Energy	
		• Law of Conservation of Mechanical Energy	
		• Rate of doing Work: Power	
		• Commercial Unit of Energy: KWh	

		• Numerical on Work, Energy and Power	
5	**Sound**	• Concept of Sound	
		• Production and Propagation of Sound	
		• Sound Needs a Medium to Travel	
		• Compressions and Rarefaction Produced in Sound	
		• Sound Waves: Longitudinal Waves	
		• Transverse Wave Motion	
		• Characteristics of Sound Waves	
		• Relation between Frequency and Time Period	
		• Relation between Speed of Sound, Frequency and Wavelength	
		• Speed of Sound in Different Media	
		• Loudness or Intensity	
		• Pitch or Frequency	
		• Quality or Timbre	
		• Reflection of Sound	
		• Echo	
		• Multiple Echoes	
		• Reverberation	
		• Range of Frequencies	
		• Application of Multiple Reflection of Sound	
		• Industrial Use of Ultrasound	
		• Medical uses of Ultrasound	
		• SONAR	
		• Structure of Human Ear (Auditory Aspect)	
		• Numerical on Sound	