CAMBRIAN PUBLIC SCHOOL , KANKE ROAD RANCHI

Subject : PHYSICS

Class: IX   SESSION-(2024-25)

SL no	Month	Name of the chapter	Learning outcome
1.	April & May	Motion	• Concepualize the meaning of terms rest and motion by considering a reference point. • Differentiate scalar & vector quantities. • Distinguish distance from displacement with the help of examples. • Distinguish between uniform & non-uniform motion. • Develop definitions for speed and velocity and differentiate between them. • Solve numerical problems based on speed, time and distance.
2.	June	Motion	• Develop meaning of acceleration. • Distinguish uniform and nonuniform acceleration • Solve numerical problems • Plot and interpret distance time & velocity time graphs. • Derive the relations $v = u + at$, $s = ut + 1/2\ at^2$ & $v^2 = u^2 + 2as$ • Solve numerical problems using above equations • Comprehend uniform circular motion • Analyse it as accelerated motion because direction is constantly changing.
3.	July , Aug	Force	• Develop meaning of force • Classify force as balanced and unbalanced forces using examples. • Develop meaning of term inertia and its relation with mass. • Explain the meaning of inertia of rest and inertia of motion. • Apply the concept to daily life situation. • Experimentally develop statement of first law of motion

			• Develop the meaning of momentum and apply to daily life situation.
4.	Sept	Force	• State the second law of motion in terms of rate of change of momentum. • Derive mathematically second law of motion, F = ma • Develop the definition for unit of force • Relate the law with inertia • Solve numerical problems • Comprehend action and reaction forces • Experimentally deduce the statement of third law of motion • Explain daily life phenomena, using third law of motion • Develop statement of law of conservation of momentum • Derive the law mathematically and explain daily life situations based on the same • Solve numerical probelms
5.	October,November	Gravitation	• Conceptualize the meaning of force of gravitation as the force of attraction between bodies. • State the law of gravitation • Mathematically represent the law gravitation • Develop definition of gravitational constant • Correlate the importance of this law in connection with the Earth revolving around sun • Solve numerical problems • Describe free fall • Comprehend the meaning of force of gravity • Deduce meaning of acceleration due to gravity 'g' • Derive an expression for 'g'.
	Dec& Jan		Revision, Important Numericals ,PYQ,S