RUBY PARK PUBLIC SCHOOL

SYLLABUS FOR THE ACADEMIC SESSION 2022-23

Subject – Physics

CLASS – X

Month	Unit	Topic	Sub-Topic	Practicals
April			Reflection of light at curved surface; terms related to spherical mirrors; Images formed by spherical mirrors	
April			Mirror formula(derivation not required); Magnification; Numerical based on the above topics; Application of mirrors.Laws of refraction; Refractive index	To determine the focal length of a concave mirror, by obtaining the image of a distant object;
April	1	Light	Applications of refraction; refraction of light by spherical lenses; Lens formula (derivation not required); Magnification;	To determine the focal length of a convex lens , by obtaining the image of a distant object.
May			Power of a lens; Numerical of lens formula and magnification; Application of lenses.	To trace the path of a ray of light through a rectangular glass slab for different angles of incidences; Measure the angle of incidence, angle of refraction, angle of emergence and interpret the results;
June	2	Human Eye and colourful world	Structure of human eye; Functioning of lens in human eye; Defects of vision and remedies.	
Periodic Test-I				

July	7	Human Eye and colourful world	Dispersion of light by glass prism; Rainbow formation; Atmospheric refraction, twinkling of stars.	To trace the path of a light ray through a glass prism
July	8		Tyndall effect; Application of scattering (excludiing colour of the sun at sunrise and sunset)	
August	9	Electricity	Electric current & circuit; Potential, Potential difference, Ohm's law; Resistance, factors on which resistance depends; seres and Parallel combination of resistors; Numericals based on resistors and combination of resistors.	To study the dependence of Potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plot a graph between V &I.
			Periodic Test-II	
September	10	Electricity	Heating effect of electric current; Electric power; Inter-relation between P, V, I and R. Numericals based on the topic.	To determine the equivalent resistance of two resistors when connected in series; determine the equivalent resistance of two resistors when connected in parallel.
October	11	Magnetic Effects of Electric Current	Magnetic field lines; Oersted's experiment. Magnetic field due to current carrying wire, Coil and Solenoid; Force on current carrying conductor.	
November	12		Fleming's Left hand rule; Alternating Current, Direct Current	
			Periodic Test-III	
December	14		Domestic wiring system; Importance of fuse; Earthing; Overload; Short-circuit.	
January		Pre-board		
Syllabus		As prescribed by the CBSE		