RUBY PARK PUBLIC SCHOOL

SYLLABUS FOR THE ACADEMIC SESSION 2022-23

Subject - Chemistry

CLASS - IX

Month	Unit	Topic	Sub topic	Practical Experiment
April	1	Matter in our surroundings	Physical nature of matter, characteristics of particles of matter (kinetic theory of matter), states of matter, change of states of matter, effect of pressure and impurities on m.p. of solids and b.p. of liquids, latent heat of fusion and latent heat of vapourisation, advantages of high latent heat of fusion of ice and high latent heat of vapourisation of water.	To determine the m.p. of ice and b.p. of distilled water.
May	1	Matter in our surroundings	Evaporation, factors affecting evaporation, difference between evaporation and boiling, cooling effect of evaporation and its applications, Heating and cooling curves.	
	Periodic Test - 1			
June	2	Is matter around us pure	Mixtures, types of mixtures, daily life examples of mixtures and identifying the components of the mixtures.	
July	2	Is matter around us pure	Solutions, properties of solutions, concentration of solutions, numericals on mass by mass % and mass by volume%, suspensions, properties of suspensions, colloids, properties of colloids, types of colloids, applications, separation of mixtures.	To study the properties of solutions, suspensions and colloids.
				To prepare and study a mixture and a compound of iron & sulphur.

August	2	Is matter around us pure	Separation of mixtures (contd.), elements, types of elements, compounds, types of compounds, physical and chemical changes.	To separate the components of a mixture of sand, salt and NH4Cl.
				To study the types of chemical reactions.
September	Revision & Periodic Test - 2			
	3	Atoms and molecules	Laws of chemical combinations, Dalton's atomic theory.	
October	3	Atoms and molecules	Atomic size, symbols, atomic mass, a.m.u., molecules, atomicity, types, ions, radicals, chemical formulae, framing of formulae, molecular mass, formula unit mass, mole concept, numericals based on mole	To verify law of conservation of mass
November	4	Structure of the atom	Charged particles in matter, canal ray, structure of the atom, Thomson's model and its limitations, Rutherford's Gold foil experiment, Rutherford's model and its limitation, Bohr's model.	
	Periodic Test - 3			
December	4	Structure of the atom	Neutrons, electronic distribution in atoms, atomic structure diagrams, valency, atomic number and mass number, isotopes, fractional atomic mass, application of isotopes, isobars.	
January	5	Natural resources	Introduction, air, the role of the atmosphere in climate control, winds, rain, air and water pollution, mineral riches in soil, soil pollution & erosion, sustainable practices.	
February	Annual examination (Entire syllabus)