



CHEMISTRY SCHEME SS1

SN	TOPICS
1.	Introduction to chemistry :- Meaning of chemistry, career prospects in chemistry, application and adverse effects of chemistry
2.	Particulate nature of matter:- physical and chemical change atoms and molecules, Dalton's atomic theory
3.	Particulate nature of matter :- constituents of atoms, protons, neutrons, and electrons, arrangement of electrons around the nucleus, atomic number
4.	Particulate nature of matter:- mass number, relative atomic mass, relative molecular mass, calculations involving relative molecular masses
5.	Symbols, formulae and equation: Symbols of elements, and their valences, compounds and mixtures, empirical and molecular formulae, laws of conservation of matter, law of constant composition, laws of multiple proportion, chemical equations and balancing of chemical equations.
6.	Standard separation techniques for mixture: classification of substances, filtration, evaporation, decantation, floatation, crystallization

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7.	Standard separation techniques for mixtures – distillation, fractional distillation, precipitation, magnetic separation, chromatography, sublimation, pure and impure substances
8.	Chemical combination: Periodic table of the first 20 elements electronic configuration of atoms, types of bonds (ionic or electrovalent bond)
9.	Chemical combination: covalent bonds, coordinate covalent bonds, hydrogen bond, van der waal forces
10.	Chemical combination: IUPAC nomenclature of compounds, states of matter (solid, liquid, gaseous) kinetic theory of matter
11.	Gas laws :- Boyles' law, Charles law, general gas law
12.	Gas laws:- Gay Lussac's law, Avogadro's law, ideal gas law, Graham's law, molar volume of gases, Avogadro's number and mole concept

SN	TOPICS
1.	Acid, Bases and Salts:- Characteristics, preparation reaction and uses of Acids.
2.	Acid, Bases and Salts: Characteristics, preparation, reactions, and uses of bases, Relative acidity and alkalinity (the P ^H Scale)

3.	Acid, bases and salts:- Properties, types and uses of salt, deliquescent, efflorescent and hygroscopic substances, solubility of salts in water
4.	Water: Sources of water, types of water (hard and soft water), Water pollutants, uses of water laboratory preparation of water
5.	Carbon and its compound:- Allotropes of carbon, coal (types and uses), uses of carbon, coke (gasification and uses) carbon (iv) oxide, synthetic gas
6.	Chemical Industries:- Types of chemical industries, importance to individuals and the nation