



## SCHOLARSHIP TEST SYLLABUS FOR 10th MOVING 11th STUDENTS

**Periodic Classification :** Classification of Elements, Dobereiner Triads, Newlands Law of Octave, Mendeleev Periodic Table-Merits & Demerits, Modern Periodic Table, Electronic Configuration -Groups & Periodic Trends- Atomic Size, Metallic & Non-metallic character, Electronegativity & electropositivity

Chemical Reaction & Equations: Chemical Reaction, Chemical Equation, Writing Chemical Equation, Balancing Chemical Equation, Types of Chemical Reaction- i. Combination, ii. Decomposition, iii. Displacement, iv. Double displacement, Exothermic and Endothermic process, Rate of Chemical reaction, Factors affecting chemical reaction, Oxidation and Reduction, Corrosion, Rancidity

**Metallurgy:** Physical and Chemical Properties of metals and non-metals, Reaction of metal and non-metal, Reactivity series, Ionic Compounds, Metallurgy and Basic Principle of Metallurgy, Prevention of Corrosion

**Carbon Compounds:** Bonds in Carbon Compounds, Carbon - An Elements, Hydrocarbon saturated and unsaturated, Functional group in Carbon Compounds, Homologous Series, Nomenclature of carbon compounds, Chemical Properties of Carbon Compounds, Macro Molecule and Polymer

**Acids, Base and Salts:** Acid, Base, Salt - Basic Concept, Ionic Compounds, Arrhenius Theory of Acids and Bases, Classification of Acids and Bases, Concentration of Acid and Bases, pH of Solution, Universal Indicator, Reaction of Acids and Bases Salts, Ionic Compounds and Electrical Conductivity, Electrolysis and Electrolyses of Water

**Structure of Atoms:** Dalton Atomic Theory, Thomson Atomic Model, Rutherford Atomic Model, Bohr Atomic Model, Sub-atomic Particle, Atomic Number and Atomic Mass Number, Electronic Configuration

Mole Concept: Atomic Mass, Molecular Mass, Mole Concept: Calculation of Moles, Mass & Atoms