



DRAVID OPEN SECONDARY AND HIGHER SECONDARY EDUCATION COUNCIL

Head Office:-RD number 1, mohalla Badh Adilabad, Telangana 504001

Verification Address: - 3008b/12 Church Road Dashmesh Nagar Nayagaon Mohali Punjab-160103

SYLLABUS CHEMISTRY

CLASS 12 CHEMISTRY SYLLABUS

Unit 1: Solutions

- Types of solutions
- Concentration (molarity, molality, etc.)
- Solubility
- Raoult's Law
- Ideal & non-ideal solutions
- Colligative properties
- Abnormal molar mass

Unit 2: Electrochemistry

- Electrochemical cells
- EMF of a cell
- Standard electrode potential
- Nernst equation
- Conductance in electrolytic solutions
- Electrolytic cells
- Batteries & fuel cells
- Corrosion

Unit 3: Chemical Kinetics

- Rate of reaction
- Factors affecting rate
- Order and molecularity
- Integrated rate equations (0 and 1st order)

- Arrhenius equation
- Collision theory (basic idea)

Unit 4: The d- and f-Block Elements

- Transition elements (d-block): properties, oxidation states, color, etc.
- Lanthanoids & actinoids
- Lanthanoid contraction

Unit 5: Coordination Compounds

- Ligands & coordination number
- IUPAC naming
- Isomerism (structural & stereoisomerism)
- Bonding (Werner's theory, VBT, CFT)
- Importance in biology and industry

Unit 6: Haloalkanes and Haloarenes

- Nomenclature, nature of C-X bond
- Preparation, reactions, properties
- Substitution & elimination reactions
- Environmental effects (e.g. ozone depletion)

Unit 7: Alcohols, Phenols and Ethers

- Structure & classification
- Preparation & properties
- Reactions (nucleophilic substitution, oxidation, etc.)
- Uses

Unit 8: Aldehydes, Ketones and Carboxylic Acids

- Nomenclature, structure
- Preparation & reactions (e.g. nucleophilic addition)
- Environmental effects (e.g. ozone depletion)

Unit 7: Alcohols, Phenols and Ethers

- Structure & classification
- Preparation & properties

- Reactions (nucleophilic substitution, oxidation, etc.)
- Uses

Unit 8: Aldehydes, Ketones and Carboxylic Acids

- Nomenclature, structure
- Preparation & reactions (e.g. nucleophilic addition)
- Hormones (basic idea)

