Class – XII DELETED SYLLABUS (For the Session of 2020-21 Only) CHEMISTRY (THEORY)

Unit I: Solid State

Electrical and magnetic properties.

Unit II: Solutions

Abnormal molecular mass.

Unit III: Electrochemistry

Laws of electrolysis (elementary idea), dry cell – electrolytic cells and Galvanic cells; lead accumulator, fuel cells; corrosion.

Unit IV: Chemical Kinetics

Concept of collision theory (elementary idea, no mathematical treatment)

Unit V: Surface Chemistry

Catalysis: homogenous and heterogeneous, activity and selectivity: enzyme catalysis; emulsion – types of emulsions.

Unit VI: General Principles and Processes of Isolation of Elements

Principles and methods of extraction - concentration, oxidation, reduction electrolytic method and refining; occurrence and principles of extraction of aluminium, copper, zinc and iron.

Unit VII: p-Block Elements

Group 15 elements: Oxides of nitrogen (structure only); Phosphorous-allotropic forms; compounds of phosphorous: preparation and properties of phosphine, halides (PCl₃, PCl₅) and oxoacids (elementary idea only)

Group 16 elements: sulphuric acid: industrial process of manufacture, properties and uses, oxoacids of sulphur (structures only).

Unit VIII: d and f Block Elements

Preparation and properties of K₂Cr₂O₇ and KMnO₄.

Lanthanoids - Chemical reactivity

Actinoids - Electronic configuration, oxidation states.

Unit IX: Coordination Compounds

Importance of coordination compounds (in qualitative analysis, extraction of metals and biological systems).

Unit X: Haloalkanes and Haloarenes.

Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

Unit XI: Alcohols, Phenols and Ethers

Alcohols: Uses of methanol and ethanol.

Unit XIII: Organic compounds containing Nitrogen

Diazonium salts: Preparation, chemical reactions and importance in synthetic organicchemistry.

Unit XIV: Biomolecules

Carbohydrates - Oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); importance.

Proteins - Enzymes.

Vitamins - Classification and functions.

Unit XV: Polymers

Classification - natural and synthetic, methods of polymerization (addition and condensation), copolymerization. Some important polymers: natural and synthetic like polythene, nylon, polyesters, bakelite, rubber.

Unit XVI: Chemistry in Everyday life:

- 1. **Chemicals in medicines -** analgesics, tranquilizers, antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, antihistamines.
- 2. Chemicals in food preservatives, artificial sweetening agents.
- 3. Cleansing agents soaps and detergents, cleansing action.