

## CHEMISTRY IN DAY TO DAY LIFE

### UNIT i: Chemistry of life and health care

Origin of life, water-the force and fundamental substance of life, carbohydrates, proteins, lipids, nucleic acids, vitamins, minerals and hormones-sources-applications and diseases due to deficiency.

Drugs-classification, Therapeutic action of different classes of drugs: analgesic, antipyretics, tranquilizers, antiseptics, disinfectants antimicrobials and antibiotics, antiacids, antihistamines, food preservatives & artificial sweeteners.

### UNIT-III: INDUSTRIAL CHEMICALS

**Plastics**-polymers-Bakelite and celluloid, polyethylene, polyvinyl chloride, polystyrene, polypropylene.

**Dyes**-Classification based on mode of application and structure-paints-ingredients-drying-pigments-types and properties –varnish.

### UNIT-IV: Chemistry and Consumer products

Chemistry in computers and electronics, chemistry in recreation, Jewellery and ornaments, Electroplating, chemistry and fireworks, chemistry of batteries/cells, sand and chemistry, safety matches, wax candles, shoe polish, mosquito coils, Portland cement, glass varieties and their uses, Soaps and detergents classification- ingredients-solids and liquids-disinfectants (phenyl, dettol type) – perfumes-raw materials – perfumes used in soaps.

### UNIT-V: Energy and Chemistry

Fuel, fossil fuel-petroleum and oil, coal-natural gas, nuclear energy, water energy, wind energy, energy from biomass and garbage, solar energy –fuel from sunlight-splitting of water-hydrogen from sunlight - hydrogen economy-fuel cells-batteries-photo voltaics-stealing the sun. Nuclear energy-nuclear fission and fusion- production of electricity by nuclear reactor-radioactivity and the hazards of radioactivity-living with nuclear power.

### Text Book:

Chemistry in daily life-Kirpal Singh, PHI Pvt Ltd, New Delhi, 3<sup>rd</sup> Edition, 2012