

① Basic-Concepts of chemistry.

- (i) mole-Concept
- (ii) molarity, molality,
- (iii) molecular mass, Equivalent mass
- (iv) mass percentage; ppm.
- (v) Stoichiometry

② Atomic-Structure -

- (i) Atomic model. (Rutherford, Bohr's model)
- (ii) Dual-Nature of e^- (De-broglie Equation)
- (iii) Heisenberg's uncertainty Principle
- (iv) Spectrum (v) Quantum- No. (vi) Photo electric Effect
- (vii) Hund's Rule (viii) Aufbau's Principle

③ Chemical-Bonding =

- (i) Covalent bond. (ii) ionic bond. (iii) Co-ordinate bond.
- (iv) v.B.T. (valence bond theory.)
- (v) Molecular orbital theory (M.O.T.)
- (vi) VSEPR Theory (vii) hybridisation (viii) Resonance

④ NOMENCLATURE OF ORGANIC COMPOUNDS