SYLLABUS FOR CBT EXAMINATION JULY 2025

SUBJECT CHEMISTRY

S NO	CLASS	CHAPTER	TOPIC	WEIGHTAGE	TOTAL QUESTIONS
01	XI	SOME BASIC CONCEPTS OF CHEMISTRY	General Introduction: Importance and scope of Chemistry. Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry.	05	05
		ATOMIC STRUCTURE	Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.	05	05
02	XII	SOLUTION	Concentration of Solution, Colligative Properties, Ideal and Non Ideal Solution, Vont Hoff Factor	05	05
		ELECTROCHEMISTRY	Galvanic Cell, Conductance and Resistance, Faraday's Law of Electrolysis and its application, Cell and its Types	05	05