



CBSE

CLASS 11

SCIENCE

Class 11 Chemistry

Rigorous introduction to foundational physical, inorganic, and organic chemistry concepts including atomic structure, chemical bonding, thermodynamics, chemical equilibrium, and reaction mechanisms.

GOVERNING BOARD

CBSE

THEORY EXAMINATION

70 Marks

INTERNAL / PRACTICAL

30 Marks (Practical)

EXAM DURATION

3 Hours

UNIT-WISE SYLLABUS & MARKS BREAKDOWN

UNIT	CHAPTERS & PRESCRIBED TOPICS	MARKS
Unit I	Some Basic Concepts of Chemistry Mole concept, percentage composition, empirical and molecular formula, stoichiometry and calculations	07
Unit II	Structure of Atom Bohr's model, de Broglie relation, Heisenberg uncertainty, quantum numbers, electronic configuration	09
Unit III	Classification of Elements & Periodicity Modern periodic law, periodic trends in atomic/ionic radii, ionization enthalpy, electron gain enthalpy, electronegativity	06
Unit IV	Chemical Bonding & Molecular Structure Valence electrons, ionic and covalent bond, VSEPR theory, hybridization (sp , sp^2 , sp^3), MO theory for homonuclear diatomic molecules	07
Unit V	Chemical Thermodynamics First law, enthalpy, Hess's law of constant heat summation, entropy, Gibbs energy, spontaneity criteria	09
Unit VI	Equilibrium Dynamic equilibrium, law of mass action, Le Chatelier's principle, ionic equilibrium, ionization of acids and bases, pH, Henderson equation	07
Unit VII	Redox Reactions Oxidation and reduction, oxidation numbers, balancing redox equations (ion-electron and oxidation state methods)	04
Unit VIII	Organic Chemistry: Principles & Techniques IUPAC nomenclature, electronic displacements (inductive, electromeric, resonance, hyperconjugation), free radicals, carbocations, purification	11
Unit IX	Hydrocarbons Alkanes, alkenes, alkynes: nomenclature, structure, physical and chemical properties; Aromatic hydrocarbons: benzene, resonance, electrophilic substitution	10

INTERNAL / PRACTICAL ASSESSMENT SCHEME (30 MARKS (PRACTICAL))

EVALUATION COMPONENT	MARKS WEIGHTAGE
Volumetric Analysis & Salt Analysis Titration (acid-base/redox) and qualitative salt analysis	16 Marks
Investigatory Project & Class Record Project report and laboratory journal	08 Marks
Viva Voce Oral examination	06 Marks

RECOMMENDED REFERENCE LITERATURE

Prescribed Textbooks: NCERT Chemistry Class 11 (Parts I & II), Pradeep's Chemistry, OP Tandon, Excellence Chemistry Notes

THE EXCELLENCE TUITION EDGE

Every unit in this curriculum is taught with structured conceptual lectures, followed by weekly speed-testing, detailed mistake analysis, and dedicated 1:1 doubt-clearing sessions to build board exam confidence.

Excellence Tuition Centres: Sarsuna (Opp. High School) · Joka · Chatterjee Para (Behala)

Admissions & Inquiries: +91 89022 70803 · excellence-tuition.vercel.app