



CBSE · CLASS 10

Science (Physics, Chemistry, Biology)

Integrated natural science program building conceptual rigour in chemical reactions, carbon compounds, life processes, human organ systems, optics, electricity, and magnetism.

Board: Central Board of Secondary Education**Theory:** 80 Marks**Internal/Practical:** 20 Marks**Exam Duration:** 3 Hours

UNIT-WISE SYLLABUS & MARKS BREAKDOWN

UNIT	CHAPTERS & PRESCRIBED TOPICS	MARKS
Unit I	Chemical Substances — Nature and Behaviour Chemical Reactions & Equations (Balancing, Types: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation-reduction); Acids, Bases and Salts (pH scale, preparation of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda, Plaster of Paris); Metals and Non-metals (Properties, reactivity series, formation and properties of ionic compounds, metallurgy basics, corrosion prevention); Carbon and its Compounds (Covalent bonding, versatile nature of carbon, homologous series, functional groups, combustion, oxidation, addition, substitution, soaps and detergents)	25
Unit II	World of Living Life Processes (Nutrition, respiration, transport, and excretion in plants and animals); Control and Coordination (Tropic movements in plants, plant hormones, human nervous system, involuntary/voluntary actions, reflex arc, animal hormones); Reproduction (Reproduction in animals and plants: asexual and sexual; reproductive health, family planning); Heredity and Evolution (Mendelian inheritance, laws of inheritance, sex determination in humans)	25
Unit III	Natural Phenomena Reflection of light by curved surfaces, images formed by spherical mirrors, centre of curvature, principal axis, focus, focal length, mirror formula & magnification; Refraction of light, laws of refraction, refractive index, refraction by spherical lenses, lens formula, magnification, power of a lens; Human eye, defects of vision and their correction (myopia, hypermetropia), refraction through a glass prism, dispersion of light, atmospheric refraction, scattering of light (Tyndall effect)	12
Unit IV	Effects of Current Electric current, potential difference and electric current, Ohm's law, resistance, factors affecting resistance, series and parallel combination of resistors, Joule's law of heating, electric power; Magnetic effects of current: Magnetic field and field lines, field due to current-carrying conductor, straight wire, circular loop, solenoid; Fleming's Left-Hand Rule, electric motor, electromagnetic induction, induced potential difference, alternating vs direct current, domestic electric circuits	13
Unit V	Natural Resources Our Environment: Ecosystem, environmental problems, ozone layer depletion, waste production and biodegradable vs non-biodegradable waste management	05

INTERNAL / PRACTICAL ASSESSMENT SCHEME (20 MARKS)

EVALUATION COMPONENT	MARKS WEIGHTAGE
Continuous Class Tests Periodic chapter-wise assessments	05 Marks
Diverse Multiple Assessment Oral tests, concept maps, project reviews	05 Marks
Practical Lab Journal Prescribed CBSE experiments, observation records	05 Marks
Portfolio & Viva Notebook evaluation and teacher interaction	05 Marks

RECOMMENDED REFERENCE LITERATURE

Prescribed Textbooks: NCERT Science Class 10, NCERT Lab Manual Science X, Excellence Formula & Chemical Equation Compendium

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