

Cohen Admission cum Scholarship Test (CAST) - 2025 - 2

Cohen International School, Bhubaneswar will be conducting an entrance examination CAST for admissions in Academic Year 2025-2026: -

- A. Nursery to Class 2 admissions – Viva Only
- B. Class 3 to Class 9 – Written test on current class subjects (Science, Maths & English). 1 hour duration.
- C. Class X going to Class XI for the academic year 2025-2026. This test will be an **OFFLINE BASED ENTRANCE TEST**,

IMPORTANT INFORMATION

Stream	Subjects	No of Questions	Total no of Questions	Total Marks	Duration
General Science & School Integrated Programme (IIT JEE/Medical)	<ul style="list-style-type: none">• Physics• Chem• Maths• Biology• Mental Ability	<ul style="list-style-type: none">• 5• 5• 10• 5• 5	30	120	10 Minutes

Syllabus for CAST-2025-2026 (X going to XI)

[General Science & School Integrated Programme -SIP (IIT -JEE/Medical)]

PHYSICS

1. Motion, 2. Force and Newton's laws, , 3. Gravitation, 4, Work, energy and power, 5. Optics, 6, Effects of Current, 7. Magnetic effects of current

CHEMISTRY

1. Matter : (i) Compounds (ii) Mixtures (iii) Colloids and Suspensions.
2. Atoms & Molecules : (i) Laws of Chemical Combinations. (ii) Mole concept and calculations based on it. (iii) Atomic mass & Molecular mass. (iv) Chemical formula of common compounds and valency.
3. Structure of Atom : (i) Electron, Proton & Neutron. (ii) Atomic Models (Rutherford's Model & Bohr's Model) (iii) Atomic Number and Mass Number (iv) Isotopes, Isobars & isotones
4. Chemical Reactions : (i) Types of chemical reactions (Combination, Decomposition, Displacement, Double Displacement, Neutralisation, Oxidation & Reduction).
5. Acids, Bases & Salts : (i) Indicators for testing acids and bases. (ii) Properties of acids and bases (iii) pH and pH scale. (iv) Preparation and properties of salts like Common salt, Washing soda, Baking soda, Bleaching powder, Plaster of Paris. (v) Classification of salts. (vi) Hydrated salts.
6. Metals and Non-metals : (i) Properties of Metals and Non-metals. (ii) Ionic compounds (iii) Ores and alloys
7. Carbon and its : (i) Homologous series. Compounds: (ii) Nomenclature of Organic compounds. (iii) Saturated and Unsaturated hydrocarbons. (iv) Chemical properties of carbon compounds [Combustion, Oxidation, Addition & Substitution reactions.]
8. Periodic Classification : (i) Mendeleev's periodic table and modern of elements periodic table. (ii) Properties of elements in groups and periods [Atomic radius, Metallic & Nonmetallic Character, Electronegativity].

MATHEMATICS

1. NUMBER SYSTEMS (Real Number)
2. ALGEBRA (Polynomials, Pair of Linear Equations in Two Variables, Quadratic Equations & Arithmetic Progression)
3. COORDINATE GEOMETRY (Coordinate Geometry & Lines (in Two-Dimensions))
4. GEOMETRY (Introduction to Euclid's Geometry, Lines and Angles, Triangles, Definitions, examples, counter examples of similar triangles, Quadrilaterals, Area, Circles, Tangent to a circle at, point of contact & Circles)
5. TRIGONOMETRY (Introduction to Trigonometry, Trigonometric Identities & Heights and Distances)
6. MENSURATION (Areas, Areas Related to Circles, Surface Areas and Volumes)
7. STATISTICS AND PROBABILITY (Statistics, Probability,

BIOLOGY

1. Cell its structure and function s.
2. Mendelian Principles (Genetic).
3. Photosynthesis in Plant.
4. Digestion in Human.
5. Circulation in Human.
6. Respiration in Plant and Animal.
7. Ecosystem.
8. Human health and diseases.
9. Reproduction in plant.
10. Reproduction in animal.