

# Cohen Admission Cum Entrance Test CACET 2022-2023

Cohen International School, Bhubaneswar will be conducting an entrance examination CACET for admission into Class XI for the academic year 2022-2023. This test will be an Online Test (Home Based Entrance Test), following strict COVID-19 norms as set by the Government of India.

## **IMPORTANT DATES**

Start of Registration	5 <sup>th</sup> Nov 2021
End of Registration	20 <sup>th</sup> Dec 2021 & 5 <sup>th</sup> Jan 2022
Date of Examination	23 <sup>rd</sup> Dec 2021 & 9 <sup>th</sup> Jan 2022 (11:00 AM to 1:00 PM)
Result Declaration	25 <sup>th</sup> Dec 2021 & 11 <sup>th</sup> Jan 2022, by 5:00 PM

<b>Stream</b>	<b>Subjects</b>	<b>No of Questions</b>	<b>Total no of Questions</b>	<b>Total Marks</b>	<b>Duration</b>
General Science & School Integrated Programme (IIT JEE/Medical)	<ul style="list-style-type: none"><li>• Physics</li><li>• Chem</li><li>• Maths</li><li>• Biology</li><li>• Mental Ability</li></ul>	<ul style="list-style-type: none"><li>• 10</li><li>• 10</li><li>• 20</li><li>• 10</li><li>• 10</li></ul>	60	240	120 Minutes
Commerce	<ul style="list-style-type: none"><li>• English</li><li>• Commercial Maths</li><li>• Economics</li></ul>	<ul style="list-style-type: none"><li>• 20</li><li>• 20</li><li>• 20</li></ul>	60	240	120 Minutes

## **SYLLABUS FOR CACET-2022-23**

### **SUBJECT:**

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

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 it's 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.

# **SYLLABUS FOR CACET – 2022-23**

## **SUBJECT – ENGLISH [COMMERCE]**

1. Reading (Comprehension)
2. Grammar (a) Tenses (b) Voice (c) Determiners (d) Prepositions (e) Conjunctions (f) Transformation of Sentences (g) Subject -Verb Agreement (h) Reported Speech (i) Modals (j) Non- Finite Verbs
3. Vocabulary (Antonyms & Synonyms)

## **ECONOMICS**

1. PEOPLE AS RESOURCE
2. POVERTY AS A CHALLENGE
3. FOOD SECURITY IN INDIA
4. SECTORS OF THE INDIAN ECONOMY
5. MONEY AND CREDIT
6. GLOBALISATION AND INDIAN ECONOMY.

## **COMMERCIAL MATHEMATICS**

1. PERCENTAGE
2. PROFIT & LOSS
3. SIMPLE INTEREST
4. FRACTIONS
5. LINEAR INEQUATIONS
6. STATISTICS
7. PROBABILITY
8. QUADRATIC EQUATIONS
9. TRIGONOMETRIC
10. CO-ORDINATE