

## Co-Cube Carrier Test Syllabus

➤ **Quantitative Aptitude:** (60 minutes)

Concepts of mathematics including Time & Work, Speed & Distance, Algebra, Equations, Progressions, Profit & Loss, Ratios, Averages, Geometry, Data Interpretation, Probability, Venn diagram, Statistics, Interest, Profit loss, Ratio, Percentages, Number Systems, Mensuration, Trigonometry.

➤ **Analytical Reasoning:** (60 minutes)

Visual Reasoning, Statement & Conclusions, Relationships, Logical Reasoning, Attention to Details, Flowcharts, Data sufficiency, Coding-decoding, Series, Odd one out, Analogies.

➤ **English Usage:** (60 minutes)

Reading Comprehension, Grammar including Articles , Prepositions, Sentence Correction, Speech, Tenses, Verbal Ability including Synonyms, Antonym, Spellings, Idioms and Phrases.

➤ **Domain Test:**(30 minutes)

- **Civil Engineering:**
  - RCC Design, Construction Scheduling, Geo-informatics, Hydraulics & Hydraulic Machines, Geotechnical Eng., Water Resource Engineering.
- **Mechanical Engineering:**
  - Thermodynamics, Fluid Mechanics, Theory of Machines, Kinematics of Machines, I.C. Engines & Compressors, SOM, Engineering material, Meteorology.
- **Electronics Engineering:**
  - Microprocessor & Microcontrollers, Digital Electronics, Integrated Circuits, Electronic Circuits, Electronic Devices, EMMI, Network Analysis & Synthesis, Control System, Communication System.
- **Electrical Engineering:**
  - Electrical Machines, High Voltage Engineering, Network Analysis & Synthesis, EMMI, Control System, Elements of Power System, Digital Electronics, Power Electronics.

- **Computer Science & IT Engineering:**
  - C, C++, OOPS Concepts, Data Structures, DBMS concepts, Operating System Concepts, Design and Analysis of Algorithms, Networking Concepts, Computer Architecture.
  
- **Employability Aptitude Test:** (60 minutes)
  - Is a comprehensive test including all the above sections
  
- **Pre-Assessment:** (3 Hours)
  - Aptitude – 60 minutes
  - Computer Fundamentals (15 minutes)
  - Domain – 30 minutes
  - Psychometric – 15 minutes
  - Coding – 60 minutes

### **Aptitude Test (60 minutes)**

Analytical Reasoning Visual Reasoning, Statement & Conclusions, Relationships, Logical Reasoning, Attention to Details, Flowcharts etc

Numerical Reasoning Concepts of mathematics including Time & Work, Speed & Distance, Algebra, Equations, Progressions, Profit & Loss, Ratios, Averages, Geometry, Data Interpretation

### **Computer Fundamentals (15 minutes)**

Basics of C/C++/OOPS - beginner level understanding of how to program in C or C++, basic syntax of these languages, theoretical knowledge about how these languages work

Basics of Data Structures – Beginner level understanding of data structures about fundamental types of structures such as trees, various methods of sorting etc

General topics in computing fundamentals to test knowledge about software, hardware, binary/decimal/hexadecimal conversions, everyday encounters with computers

### **Domain Test (30 minutes)**

Civil RCC Design, Theory of Design & Structures, Soil Mechanics & Foundation, Construction Scheduling, Water Resource Engineering / Hydrology, Geotechnical Engineering

Electrical Electrical Machines, EMMI, Network Analysis and Synthesis, Control Systems, Digital Electronics, Power Electronics, Power System and Instrumentation, Microcontroller and Microprocessor

Mechanical Thermodynamics, IC Engines and Compressors, Theory of Machine, Engineering Material / Meterology, SOM, Fluid Mechanics

Electronics Electronic Devices & EMMI, Network Analysis and Synthesis, Microprocessor & Microcontrollers, Digital Electronics, Communication System, Electronic Circuits, Control System

Computer Science C, C++, OOPS Concepts, Data Structures, DBMS concepts, Operating System Concepts, Design and Analysis of Algorithms, Networking Concepts, Computer Architecture

**Psychometric (15 minutes)**

Behavioral profiling based on commonly known personality traits

**Coding Test (60 minutes)**

Writing codes to solve a set of problems in language of choice : C, C++, C#, Java