

Junior Engineer (Civil)

1. Logical Reasoning

It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion etc.

2. Numerical Reasoning

The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be percentage, Ratio & Proportion, Square roots, Averages, Interest, Profit & Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & work, Basic algebraic identities of School Algebra, Elementary surds, Graphs of Linear Equations, Triangle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles and any other question of matriculation level.

3. Verbal Reasoning

Questions in this component will be designed to test the candidate's understanding and knowledge of English language and will be based on spot the error, fill in the blanks, synonyms, antonyms, spelling/detecting mis-spelt words, idioms & phrases, one word substitution, Improvement of sentences, active/passive voice of verbs, conversion into direct/indirect narration, shuffling of sentence parts, shuffling of sentences in a passage, comprehension passage and any other English language questions at the level of matriculation.

4. General awareness

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current event and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighboring countries especially pertaining History, Culture, Geography, Economic Scene, General Policy, Indian Constitution & Scientific Research and Others.

5. Proficiency in Government Rules/Regulations

Questions in this component will be aimed at testing the candidate's understanding of the various Government of India rules concerning FR/SR, GFR, Pension rules, Procurement/Materials management and store management, Income tax, GST, RTI, CCS CCA rules, CCS conduct rules, act, ordinance & statute of central universities etc.

6. Civil Engineering

Questions in this component will be aimed at testing the candidate's civil engineering knowledge in Building Materials, Estimating, Costing and Valuation, Surveying, Soil Mechanics, Hydraulics, Irrigation Engineering, Transportation Engineering, Environmental Engineering Structural Engineering: Theory of Structures, Concrete Technology, RCC Design, Steel Design.

Section name	Marks per item	No. of items
Logical Reasoning	1 mark	10
Numerical Reasoning	1 mark	10
Verbal Reasoning	1 mark	10
General Awareness	1 mark	10
Proficiency in Govt. Rules/Regulations	1 mark	20
Civil Engineering	1 mark	40
Total		100