

**JUNIOR ENGINEERS (CIVIL, ELECTRICAL)**  
**INDICATIVE EXAMINATION SYLLABUS**

The standard of the questions will be approximately of the level of Diploma in Engineering (Civil/ Electrical) from a recognized Institute, Board or University recognized by All India Board of Technical Education. All the questions will be set in SI units. The details of the syllabus are given below:

**JUNIOR ENGINEER (CIVIL)**

1. Building Materials
2. Estimating, Costing and Valuation
3. Surveying
4. Soil Mechanics
5. Hydraulics
6. Transportation Engineering
7. Environmental Engineering
8. Structural Engineering
9. Theory of structures
10. Concrete Technology
11. RCC Design
12. Steel Design

**JUNIOR ENGINEER (ELECTRICAL)**

1. Circuit law
2. Magnetic Circuit
3. AC Fundamentals
4. Measurement and measuring instruments
5. Electrical Machines
6. Fractional Kilowatt Motors and Single Phase Induction Motors
7. Synchronous Machines
8. Generation, Transmission and Distribution
9. Estimation and costing
10. Utilization of Electrical Energy
11. Basic Electronics

**QUESTION MATRIX**

In this regard, as per the following scheme question papers are to be prepared and marks to be evaluated:

1. Total 120 nos. questions will be there. Total time for CBT will be 120 minutes.
2. There will be no negative marking. Each question will carry one mark.
3. 90 questions will be from Subject Knowledge as per syllabus already given.
4. 30 questions will be from General Awareness & Current Affairs, Quantitative Aptitude, Reasoning Ability and Verbal Comprehension.
5. The difficulty level should be moderate.