

**Recruitment Test for the Post of Lecturer and Lab. Engineer (Civil Engineering)**  
**Sample Questions**

**Sample Questions:**

**PART A: Multiple Choice Questions**

1. The failure of a column depends upon  
a. weight of column      b. length of column      c. slenderness ratio      d. cross sectional area of column
2. The upper surface of the weir over which water flows, is known as  
a. Vein      b. Nappe      c. Crest      d. None of these
3. The plasticity index is  
a. Liquid limit - shrinkage limit      b. liquid limit - plastic limit      c. plastic limit - liquid limit      d. plastic limit - shrinkage limit
4. The traffic signs which inform road user about certain rules and controls, which they have to observe for safe and free flow of traffic are called  
a. Regulatory signs      b. Warning signs      c. Informatory signs      d. Markings
5. Steel is excellent in both tension and compression, but is susceptible to -----.  
a. Bending      b. Shear      c. Torsion      d. Buckling
6. How many bricks of size  $3\frac{1}{4} \times 3\frac{3}{4} \times 11\frac{7}{8}$  inches will be required per square foot of a wall when the mortar joint is  $\frac{1}{4}$  inch, and thickness of the wall is  $3\frac{3}{4}$  inches?  
a. 2.39 bricks/sft      b 3.39 bricks/sft      c. 4.39 bricks/sft      d. 5.39 bricks/sft
7. An activity has an optimistic duration estimate of 8 days, a most likely estimate of 10 days, and pessimistic estimate of 16 days. What is the weighted average duration in days?  
a. 10.67      b. 5.67      c. 11.33      d. 8.50

**Part B-Analytical Writing**

Read the following case and answer the questions provided at the end.

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Based on the aforementioned study, answer the following questions.

1. Identify the major problems, findings and summarize the study. Support your answers using the facts and data provided in the study. Answer should not be more than 150-200 words.
2. Provide conclusions and recommendations based on your answer to question 1.

**Annexure-A**  
**Subjects Useful for Preparation of MCQs (Civil Engineering)**

**Structural Engineering**

Theory of Structures/Structural Analysis I & II  
Strength of Material/Mechanics of Solids I & II  
Reinforced Concrete Design I & II  
Steel Structures  
Structural Design & Drawing

**Surveying and Transportation Engineering**

Transportation Engineering I & II  
Surveying I & II  
Engineering Materials

**Water Resources and Coastal Engineering**

Fluid Mechanics I & II  
Hydraulic and Water Resources Engineering  
Environmental Engineering I & II

**Geo-Technical Engineering**

Soil Mechanics I & II  
Engineering Geology / Geo-Technical Engineering I & II

**Construction Engineering Management**

Engineering Construction  
Construction Planning and Management  
Quantity Surveying/Civil Works Quantity and Cost Estimations  
Engineering Economics  
Probability and Statistics