

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CE) (2011 Onwards) (Sem.-3)
BUILDING MATERIAL & CONSTRUCTION

Subject Code :BTCE-305

Paper ID : [A1117]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) Composition of good brick earth.
- b) Varieties of fire bricks.
- c) Hydration of cement.
- d) Segregation and Bleeding of concrete.
- e) Qualities of good timber.
- f) Fire protection measures in a building.
- g) Classification of roof trusses.
- h) Defects in Plastering.
- i) Plumbing services in a residential building.
- j) Factors for selecting suitable floor for building.

SECTION-B

- 2 Define and explain the workability of concrete. What are the various factors affecting it? List the methods for finding the workability of concrete in lab.
- 3 How the consistency of cement is determined? How does the knowledge of this value help an engineer in construction work?
- 4 Describe the importance of the following in RCC work :
 - i) Water Cement Ratio.
 - ii) Compaction of concrete.
 - iii) Curing of concrete.
 - iv) Bulking of sand.
- 5 Explain the sources, causes and bad effects of the dampness in buildings.
- 6 Explain the decay and preservation of timber.

SECTION-C

- 7 Discuss in detail, the types of foundations and causes of failures of foundation and its remedial measures.
- 8
 - a) Explain the classification of bricks as per Indian standards.
 - b) Discuss the operation of preparation of clay for the manufacture of bricks.
 - c) Why the bricks should be burnt properly?
 - d) Explain the difference between the English bond and the Flemish bond.
- 9
 - a) Write short notes on :
 - i. White washing
 - ii. Snowcem wash.
 - b) What are the ingredients of Paint? Describe briefly each of them.