

Roll No .....

**CE-404****B.E. IV Semester**

Examination, June 2016

**Construction Materials And Techniques****Time : Three Hours****Maximum Marks : 70**

- Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
 ii) All parts of each question are to be attempted at one place.  
 iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.  
 iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What do you mean by seasoning of stone?  
 b) Write the engineering properties of timbers.  
 c) Explain the different tests conducted on bricks to assess the quality.  
 d) Describe the methods of quarrying of stone for use in stone masonry.

OR

Describe the different flooring tiles and their characteristics.

2. a) Explain about the fly ash mortar.  
 b) mention the ingredients of D.P.C. material for water proofing work.  
 c) Explain one of the advance materials used in flooring.  
 d) Discuss the building materials manufactured from industrial wastes.

OR

Write notes on :

- i) Stabilized mud blocks
- ii) Fascia material

3. a) Define the term "Bearing capacity of soil".  
 b) List out the different soil type encountered in India.  
 c) Describe the soil-cement stabilization techniques.  
 d) Briefly describe the different types of building foundation.

OR

Write notes on :

- i) failure of foundation
- ii) Repair techniques for foundation

4. a) Draw the sketch of Flemish bond in brick masonry with its description.  
 b) Write the difference between load bearing and non-load bearing walls.  
 c) Discuss the common defects, which may occur during construction of masonry walls.  
 d) Write the short notes on :  
     i) Hollow concrete blocks  
     ii) Precast stone masonry blocks

OR

Describe the different types of RCC stairs used in buildings.

5. a) Explain about the Ferro-cement roofing.  
 b) Explain the term "false ceiling".  
 c) Describe the sound insulation system in an auditorium hall.  
 d) Write notes on :  
     i) Reinforced brick concrete  
     ii) R.C.C. Jack Arch.

OR

Describe the materials used in low cost housing in India. Explain the construction techniques too.

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