

Roll No

CE - 404**B.E. IV Semester Examination, June 2014****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.

UNIT – I

1. a) What are the qualities of a good building stone? 2
- b) What are the various uses of stones? 2
- c) What is meant by dressing of a stones? Describe its various varieties. 3
- d) What are tiles? Discuss various varieties and in short describe the process of manufacturing the same. 7

OR

What do you mean by seasoning of timber? What are the different methods of seasoning? Explain. 7

UNIT – II

2. a) What is fly ash? 2
- b) What are the advantages of stabilized mud blocks? 2
- c) Explain D.P.C. What materials are used for providing D.P.C? 3
- d) Enumerate the Agriculture and Industrial waste which can be used as a building material. 7

OR

What advance materials are used for flooring now a days. 7

UNIT – III

3. a) What do you understand by bearing capacity of soil? 2
- b) What are the different types of soil? 2
- c) Explain wall footings with neat sketches. 3
- d) Describe well foundation and what are its causes of failure? 7

OR

What are under - reamed piles? Where and why they are used? Give a dimensioned sketch of the same. 7

UNIT – IV

4. a) What are the cavity walls? 2
- b) Write the names of different types of doors. 2
- c) What are the merits and demerits of brick masonry. 3
- d) Enlist the types of stairs. Explain any two of them in detail. 7

OR

Enumerate various types of bonds used in brick masonry. Draw sketch of English and Flemish bonds. 7

UNIT – V

5. a) What are the advantages of sloping roof? 2
- b) What are the Flat roofs? 2
- c) Write short notes on: i) Jack Arch Roofs ii) False ceiling 3
- d) Explain about the various methods used for thermal insulation of the roof / ceiling. 7

OR

Explain what is good water supply arrangement and good drainage arrangement in a residential building. 7