

Roll No .....

**CE - 404**

**B.E. IV Semester**

Examination, June 2013

**Construction Materials And Techniques**

**Time : Three Hours**

**Maximum Marks : 70/100**

**Note:** Attempt all questions.

1. a) Describe the qualities of good building stone.
- b) Describe the manufacturing process of clamp burnt brick.

OR

- a) Describe the defects of timber.
  - b) Write short notes on :
    - i) Fly ash brick
    - ii) Need for wood substitute.
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2. a) Describe the role of fly ash in concrete. Why fly ash have large scope to use as civil engineering construction material.
  - b) Write short notes on :
    - i) Requirements of DPC material
    - ii) Requirements of flooring material

OR

- a) What are the merits and demerits of clay products in sanitary fitting?
- b) What are the merits and demerits of PVC doors and windows?
- c) Enumerate the industrial wastes, which can used in civil engineering construction material.

- a) Write short notes on :  
 i) Bearing capacity of soil    ii) Soil stabilisation  
 iii) Under Reamed pile
- b) What are the classification of foundation. Describe any one foundation in details.

OR

- a) Draw simple sketches of -  
 i) Grillage foundation.    ii) Brick arch foundation.
- b) What are the functions of foundation.
- c) How depth of foundation, decided.

4. a) Draw the plan of alternative course of  $1\frac{1}{2}$  brick wall with Flemish bond.

- b) What is cavity wall? What are its advantages?
- c) What are the merits hollow concrete block over brick?

OR

- a) What are the merits and demerits of English bond over Flemish bond in brick masonry wall?

- b) Write short notes on :

- i) Function of plastering on wall    ii) Types of stairs

5. a) What are the requirement of good thermal insulator?
- b) Enumerate the various types of flooring. Describe comment concrete flooring in details.
- c) What is reverberation time?

OR

- a) What are the merits and demerits of pitched roof over flat roof?

- b) Draw neat sketch of king post truss.

- c) What are the meaning of Echoes and Reverberation time?

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