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**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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