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Seat No.

## S.E. (Civil) (Part - I) (Semester - III) Examination, Dec. - 2013 BUILDING CONSTRUCTION

Sub. Code: 42657

Day and Date: Monday, 30 - 12 - 2013

Total Marks: 100

Time: 9.30 a.m. to 1.30 p.m.

**Instructions:** 

- 1) Question No. 1 is compulsory.
- 2) Attempt any two questions from the remaining in Section I.
- 3) Use full imperial sheet for Section II.

## **SECTION - I**

Q1) a) Draw sectional elevation of an isolated column footing with R.C.C. details. [10]

[8]

- b) State and explain different types of stone masonry.
- Q2) a) Enlist different types of bonds in brick masonry. Draw neat sketches of any two bond types. [8]
  - b) Explain methods of compacting and curing of concrete for slab. [8]
- Q3) a) Explain method of heat insulation of buildings. [8]
  - b) Explain difference between P.C.C. and R.C.C. Explain their use with examples. [8]
- Q4) Write short notes on the following:

[16]

- a) Mortars
- b) Pile foundation
- c) Anti-corrosive treatment
- d) Anti-termite treatment

## **SECTION - II**

Q5) Design and draw Plan and Section of a R.C.C. dog-legged stair with suitable scale for the following data. Write the design steps on the drawing sheet. [25]

Height to be negotiated = 3.00 m

The stair hall size =  $2.0 \text{m} \times 4.5 \text{m}$  (internal)

Width of stair = 1.00m

Assume suitable data wherever necessary.

Q6) Draw to a scale of 1:10, a Sectional Plan, Sectional Side View and Elevation of a T.W. paneled door having two shutters for the following data, [25]

Clear opening:  $1000 \text{mm} \times 2100 \text{mm}$ 

Frame size: 100mm × 75mm,

Styles: 125mm × 40mm.

Assume suitable data wherever necessary.