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# S.E. (Civil) (Part - I) (Semester - III) Examination, December - 2014 BUILDING CONSTRUCTION AND MATERIALS (Revised) 

Sub. Code : 63342

Day and Date : Wednesday, 10-12-2014
Total Marks : 100
Time : 10.00 a.m. to $01.00 \mathrm{p} . \mathrm{m}$.

## Instructions : 1) All the Questions are compulsory.

2) Use full imperial sheet for drawing.
3) Consider suitable data if required.

## SECTION - I

Q1) a) List the types of cement and explain properties of each with specific use.
b) Enumerate the various classes of rubble masonry. What are the important points to be kept in view while carrying out stone work?

Q2) a) List the requirement of a building as a whole and explain any three in details.
b) If one of the column lies just at the edge of property line (plot boundry) then which foundation is more suitable? Explain with neat sketch.

OR
a) Explain the uses of aluminium, glass, plastic \& chemicals in construction.
b) What is composite masonry? Explain uses of composite masonry with the materials used for it.

Q3) Write short notes (any four):
a) Selection of floor covering material.
b) Types of lintel.
c) Column formwork.
d) Types of trusses and their use.
e) Raft foundation.

## SECTION - II

Q4) Draw a sectional plan elevation \& sectional side view for a panel door with a following data-
a) Clear opening - $1200 \times 2100 \mathrm{~mm}$
b) Frame size $\quad-\quad 75 \times 150 \mathrm{~mm}$
c) Partially glazed panel
d) No. of Shutters - 1 (Consider suitable data as per requirement)

OR
Draw a sectional plan, elevation and sectional side view for a T.W. casement window with ventilator for following data-
a) Glazed window
b) Size of window $\quad-\quad 1200 \mathrm{~mm} \times 1200 \mathrm{~mm}$
c) Height of ventilator - 300 mm
(Consider suitable data as per requirement)

Q5) Design and draw plan \& section of R.C.C. Quarter turn staircase for residential building having floor height 3.3 m (Consider suitable data as per requirement).

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