

Seat No.	
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S.E. (Civil) (Part-I) (Semester-III) (Revised)
Examination, May - 2017
BUILDING CONSTRUCTION AND MATERIALS
Sub. Code : 63342

Day and Date : Thursday, 18-05-2017

Total Marks : 100

Time : 02.00 p.m. to 6.00 p.m.

- Instructions :**
- 1) All questions are compulsory.
 - 2) Use full imperial sheet for drawing.
 - 3) Consider suitable data if required.

SECTION-I

Q1) a) List the Types of Aggregates and write Mechanical & Physical properties of each Aggregate. **[8]**

b) Explain use of Aluminum, Glass, Plastic & Fly Ash in Construction industry. **[8]**

Q2) a) List the types of foundation & write suitability of each foundation. **[10]**

b) Explain Sub-Structure & their Componets with neat sketch. **[6]**

OR

a) Define the various terms used in stone masonry with neat sketch. **[8]**

b) Explain Requirement of good Staircase. **[8]**

Q3) Write short notes on (any three). [18]

- a) Dressing of Stone
- b) Use of Structural Steel in Construction
- c) Dimensional Stability as a basic requirement of building
- d) Rat Trap Bond in Brick Masonry
- e) Types of Lintel

P.T.O.

SECTION-II

Q4) Design & draw a plan & section of R.C.C. Quarter Turn Staircase for official building having floor height 3.6m with flight width 1.5m (Consider suitable data as per requirement). [25]

OR

Design & draw a plan & section of R.C.C Open well Staircase for a apartment building for following data:

- a) Floor Height - 3.10 M
- b) Flight width - 1.20M

(Consider Suitable data as per requirement)

Q5) Draw a Sectional Plan, Elevation & Sectional side view for a T.W. Glazed Casement window. [25]

- a) Size of window - 1200 x 1500 mm
- b) Frame Size - 80 x 100 mm
- c) No. of panel - Two for each shutter
- d) No. of Shutter - 2 No's

(Consider Suitable data as per requirement).

