

Seat No.	
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S.E. (Civil) (Part - II) (Semester - IV) (Revised) Examination,
April - 2016

BUILDING DESIGN AND DRAWING

Sub. Code : 63348

Day and Date : Tuesday, 26 - 04 - 2016

Total Marks : 100

Time : 09.30 a.m. to 01.30 p.m.

- Instructions :
- 1) All questions are compulsory.
 - 2) Figures to the right indicate full marks.
 - 3) Assume suitable data, If required and clearly mention it.

SECTION - I

- Q1) a) List the various factors to be considered in selection of good site for residential building. [5]
- b) Explain any five principles of planning a building. [5]

OR

- b) Explain the significance of Sun Diagram.

Q2) A (G+1) storied residential bungalow is to be constructed on a rectangular plot of size 20m×25m. The front and rear margins to be provided are 4.5m and 3.0m respectively and side margins of 2.25m each. Plot facing on 9.0m wide road on East side. Following are the requirements:

- i) Verandah & Porch
- ii) Living - 15 to 20 m²
- iii) Kitchen and Dinning - 10 to 12m² each
- iv) Master Bed - 14 to 16m²+Attached Toilet
- v) Children Bed -12 to 15 m²
- vi) Guest Bed - 12 m²+Attached Toilet
- vii) Sanitary Block as per requirement
- viii) Staircase

Draw to a suitable scale

- a) Detailed ground floor and first floor plans. [25]
 - b) Schedule of Doors, windows and ventilators. [5]
- Q3) a) Classify various maintenance jobs of a building. [5]
- b) What are the salient features of a Green building? [5]

OR

- b) Explain the various cost reduction methods for Low cost housing.

SECTION - II

- Q4) a) Name the various types of pipes used in a house drainage system, the different materials used in manufacturing, and their standard diameters. [10]
- b) What is rain water harvesting? Draw a neat sketch of 'Rain water harvesting' system through bore-well. [6]

OR

- b) What factors affect designing and planning of electrical services?
- Q5) a) What are the systems of ventilation? Differentiate between artificial and natural ventilation. [8]
- b) State the necessity of air conditioning. Explain the components of A.C. [8]

OR

- b) What do you mean by sound insulation? What are the advantages of sound insulation?
- Q6) Write short notes on any three: [18]

- a) Necessity of painting and types of paints
- b) Objective of plastering
- c) Types of pointing
- d) Wall cladding
- e) Internal wall finishes - POP & gypsum plaster

