

Seat No.	
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S.E. (Civil) (Part - II) (Semester - IV) (Revised)

Examination, May - 2017

BUILDING DESIGN AND DRAWING

Sub. Code : 63348

Day and Date : Friday, 05 - 05 - 2017

Total Marks : 100

Time : 9.00 a.m. to 1.00 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) State various factors considered in selection of a site for a residential building. [5]

b) Write a short note on 'Circulation' as a principle of planning. [5]

OR

b) Explain building line and control line. [5]

Q2) Design a semidetached bungalow for two brothers, One Civil Engineer and one an Advocate each having a built up area of 175m². The details of each bungalow are as follows:

- a) Ground floor - B.U.A.-Approx. 100m² and F.F. B.U.A. - Approx. 75 m².
- b) Keeping principles of planning in mind divide the following units on the G.F. and F.F. - Verandah, Living, Kitchen cum Dinning, Master Bedroom with attached Toilet, Children Bedroom, Guest Bedroom with attached Toilet, common toilet and terrace.
- c) A staircase of min.0.9m width.
- d) A space for uncovered or partially covered for car parking.

P.T.O.

- e) Suitable size of verandah and circulation spaces

Note: A deviation of $\pm 15\%$ area is allowable.

Draw to a suitable scale

- i) Plan (G.F. & F.F.) of any one bungalow. [25]
 ii) Furniture layout of Master Bedroom (Scale 1:50). [5]

- Q3) a)** What are repairs and rehabilitation of a building? [5]
 b) Explain various materials used as alternatives for conventional for low cost housing. [5]

OR

- b) Write a short note on efficient design of green building. [5]

SECTION - II

- Q4) a)** State the characteristics of traps and explain 'Intercepting Trap' with a sketch. [10]
 b) Explain the various systems of wiring. [6]

OR

- b) State the general requirements of water storage tank. [6]

- Q5) a)** What is the necessity of ventilation and what are the factors affecting on ventilation? [8]
 b) What are different acoustical defects? Explain any one in detail. [8]

OR

- b) Differentiate between summer and winter air conditioning. [8]

- Q6) Write short notes on any three:** [18]

- a) Types of paints.
 b) Characteristics of good plastering.
 c) Types of pointing.
 d) Wall cladding and dado work.
 e) Internal wall finishes - POP & gypsum plaster.