Fifth Semester B. E. Degree Examination, December 2018
(CIVIL ENGINEERING)
COMPUTER AIDED BUILDING PLANNING AND DRAWING
Time: 3 Hours

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Fifth Semester B. E. Degree Examination, December 2018
(CIVIL ENGINEERING)

COMPUTER AIDED BUILDING PLANNING AND DRAWING
Max. Marks: 80

Note: Answer any TWO full questions. Assume any missing data suitably.

Q1. Prepare a working drawing for an isolated rectangular RCC column and footing has the following details:

Column size: (400 x 600) mm.

Size of footing: 2m x 3m of uniform thickness 450mm.

Depth of foundation below GL = 1.5m

Height of column to be shown above GL = 1.0m

Thickness of PCC bed in 1:3:6 = 75mm

Details of reinforcement:

Column: #8 - 16\phi as main bars with 2L - 8\phi @ 150 c/c lateral ties

Footing: Longer direction steel - 12¢ @ 130 c/c

Shorter direction steel - 12¢ @ 220 c/c

(30 Marks)

OR

- Q2. Draw plan and sectional elevation of RCC dog legged staircase for an office building which measures 3m x 5.5m. The vertical distance between the floor is 3.3m (including landing). Thickness of the floor slab is 150mm. Provide steps with tread of 300mm and rise of 150mm. Thickness of waist slab and landing slab is 150mm. Width of stair is 1.5m. Reinforcement details: main steel: 10φ @125 e/c spacing and distribution: 8φ @ 250 c/c spacing. (30 Marks)
- Q3. Line diagram of single storey residential building is given in figure Q3. Draw to scale the following:
 - a. Plan at sill.
 - b. Front elevation.
 - c. Section along XX

(50 Marks)

OR

- Q4. Line diagram of single storey Hospital building is given in figure Q4. Draw to scale the following:
 - a. Plan at sill.
 - b. Front elevation.
 - c. Section along XX

(50 Marks)

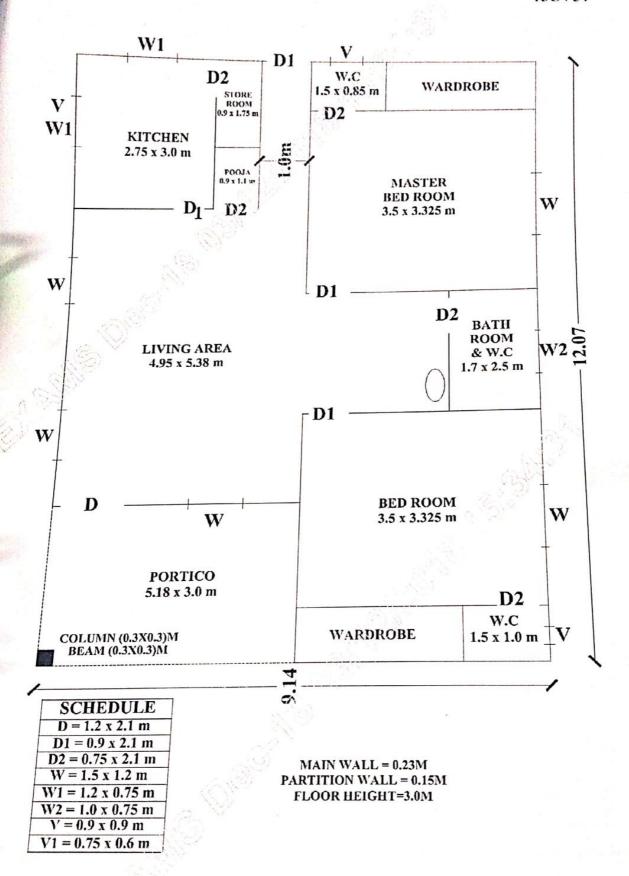
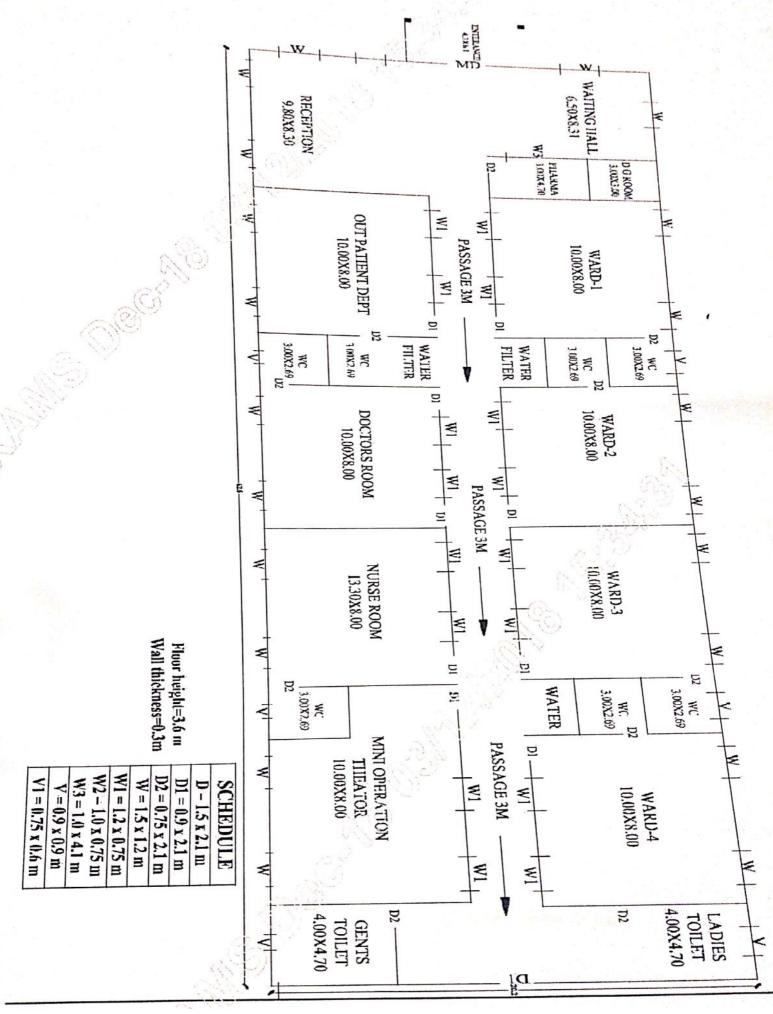
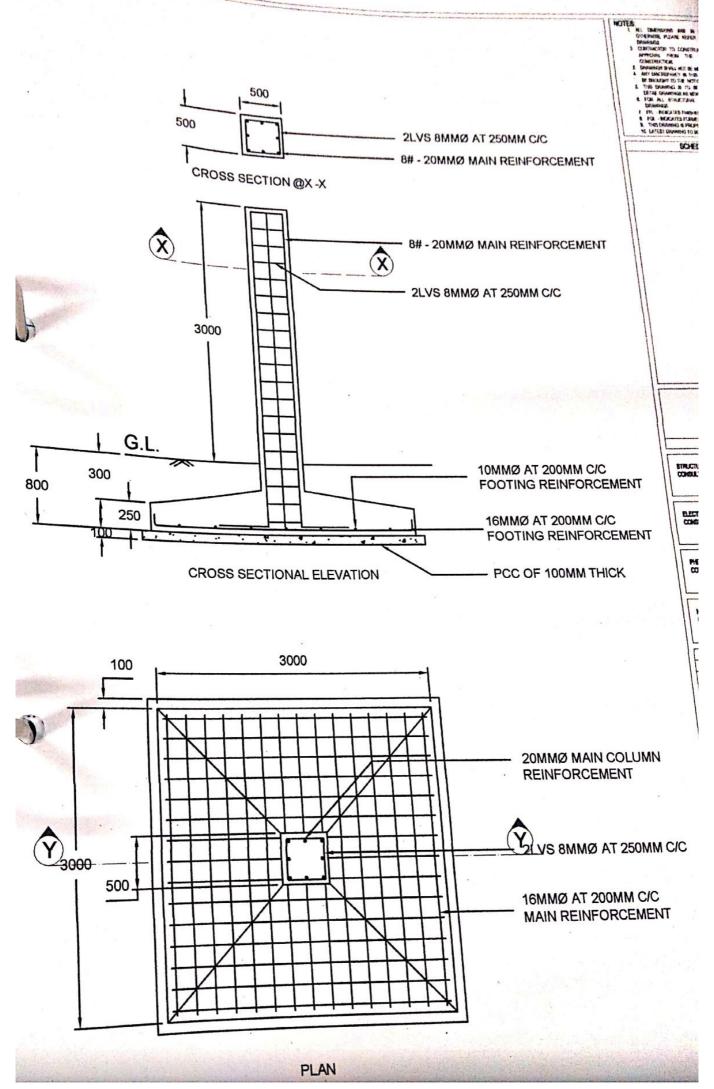


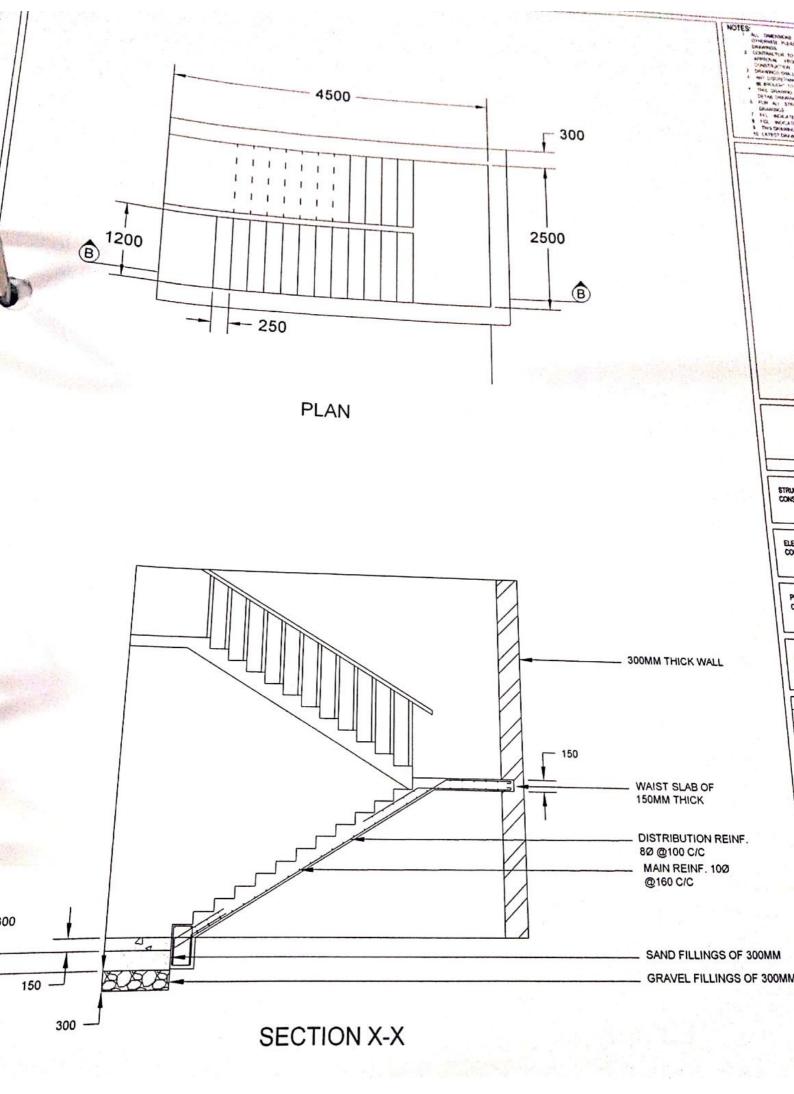
Figure Q3. Line diagram of single storey residential building



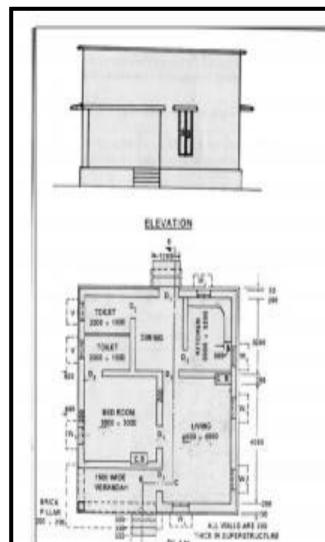
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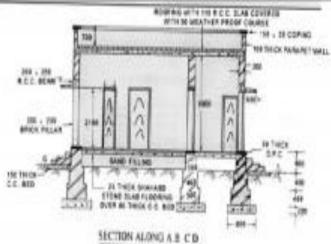


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SCHEDULE OF BOORS, WINDOWS EYC.			
Doignation	Numbers	Modelar size in man	Specifications
10 DS 21	D ₁ = 4 No.	1600 + 2100	Phohed Dwe
9 235 20	D, = 3 No.	900 × 2000	Flushed Door
12 WT 15	W, + 5 No.	1206 × 1500	Glazzel window
10 WT 15	W, = 2 No.	1000 × 1500	-40-
10 V 6	V = 2 Na.	1000 × 600	Glazed ventilator
12 CBT 15	CR. v. 2 No.	1200 × 1500	Cop board with flushed shutters.

Note / All dimension are in mo.

RESIDENTIAL BUILDING

