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Fifth Semester B.E. Degree Examination, Jan./Feb. 2021
(CIVIL ENGINEERING)

COMPUTER AIDED BUILDING PLANNING AND DRAWING

Time: 3 Hours

Max. Marks: 80

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

- Q1. A sequence RCC column 400X400 mm is resting on a sloped RCC square footing. The column reinforcement consist of 6 bars of 16 mm dia, with 2 legged 8 mm dia stirrups at 200 mm c/c and the footing reinforcement consist of 12 mm dia bars @ 150 mm c/c, both ways. The size and thickness of the footing are 1000X1000 mm and 750 mm respectively. Draw to scale the following
- Plan of the footing showing the reinforcement details.
 - Vertical section of the column with footing
 - Cross section of column.

(30 Marks)

OR

- Q2. Draw to scale the plan and sectional elevation of both the flights of a open navel stair with rectangular well for an office building with the following data:
Inside dimension of staircase=6X4.5m
Height between the floors=3.75m
Thickness of the floor slab and the landing slab=150mm
Width of stair =1.5m.

(30 Marks)

- Q3. The line diagram of a residential building is given in Fig Q3. Draw to scale the following:
- Plan at sill.
 - Front elevation.
 - Section along XX.
 - Schedule of openings.

(50 Marks)

OR

- Q4. The line diagram of a School building is given in Fig Q4. Draw to scale the following:
- Plan at sill.
 - Front elevation.
 - Section along XX.
 - Schedule of openings.

(50 Marks)

