CBCS SCHEME

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17CV54

# Fifth Semester B.E. Degree Examination, December 2019
## (CIVIL ENGINEERING)
## COMPUTER AIDED BUILDING PLANNING AND DRAWING

**Time: 3 Hours** **Max. Marks: 100**

Note: 1. Answer any *TWO* full questions as per INTERNAL CHOICE.
2. Assume any missing data suitably.

**Q1.** Draw sectional elevation, plan of footing reinforcement for a combined RCC column footing for the following given details:

i) Size of the column=400 X 400 mm
ii) Size of footing=4000 X 2000 mm
iii) Depth of footing = 600 mm
iv) Thickness of concrete bed= 100 mm
v) Centre to centre distance between two columns= 2000 mm
vi) Longitudinal reinforcement in the column= 8 bars of 20 mm diameter.
vii) Transverse reinforcement= 2L- 8mm HYSD bars @ 200 mm c/c
viii) Footing reinforcement= Top mat 12 mm diameter placed @150 mm c/c both ways and bottom mat 12 mm diameter placed @100 mm c/c both ways

**(40 Marks)**

**OR**

**Q2.** Draw six consecutive courses for corner joints of the following walls in English and Flemish bond: One brick thick wall i.e., 200 x 200 mm

**(40 Marks)**

**Q3.** The line diagram of a residential building is given in Fig Q3. Draw to scale the following:

a) Plan at Sill
b) Front Elevation
c) Section at A-A
d) Schedule of Openings **(60 Marks)**

**OR**

**Q4.** The line diagram of a School building is given in Fig Q4. Draw to scale the following:

a) Plan at Sill
b) Front Elevation
c) Section at X-X
d) Schedule of Openings **(60 Marks)**

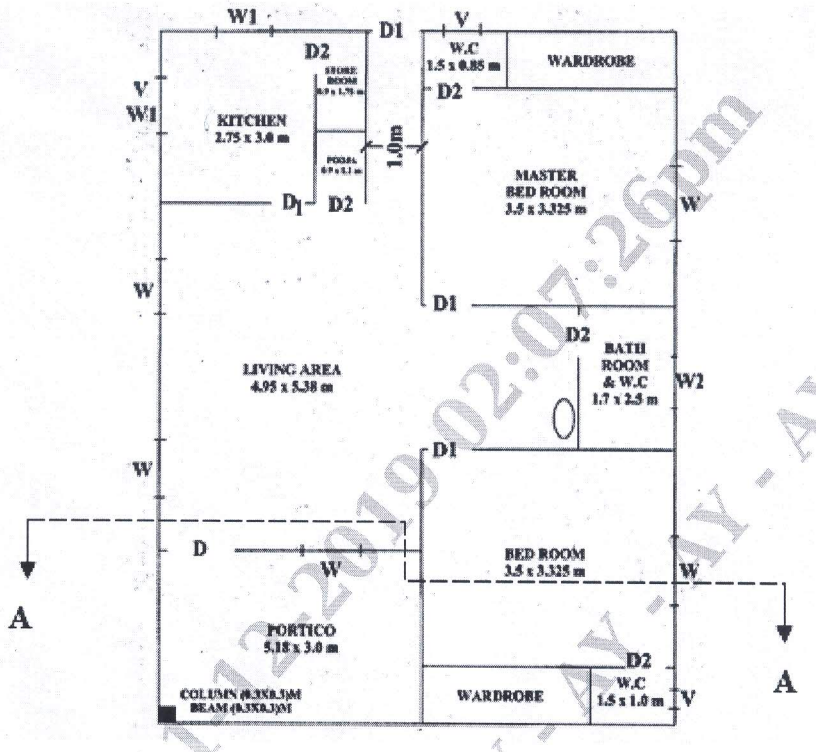


Fig Q3

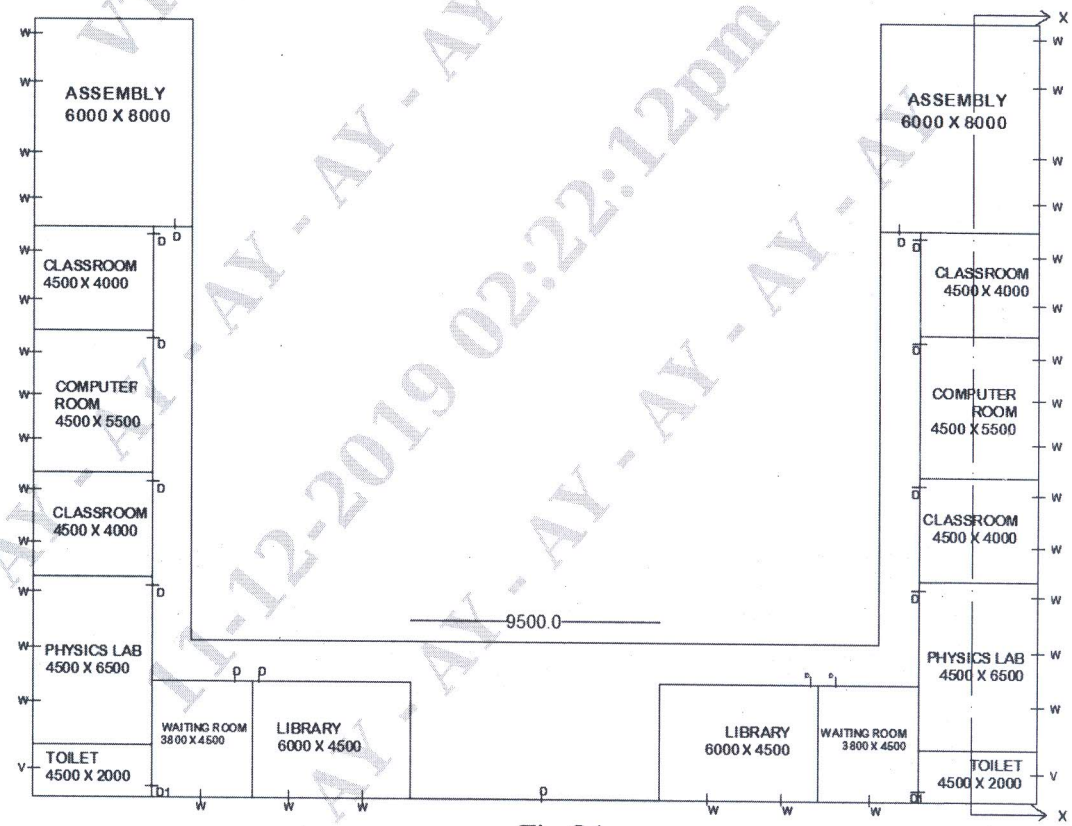


Fig Q4