USN | | | | | | | | | |

15CV54

Fifth Semester B.E. Degree Examination, December 2019
(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 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 1200X1200 mm and 750 mm respectively. Draw to scale the following
　a. Plan of the footing showing the reinforcement details.
　b. Vertical section of the column with footing
　c. 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:
　a. Plan at sill.
　b. Front elevation.
　c. Section along XX.
　d. Schedule of openings.

(50 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 along XX.
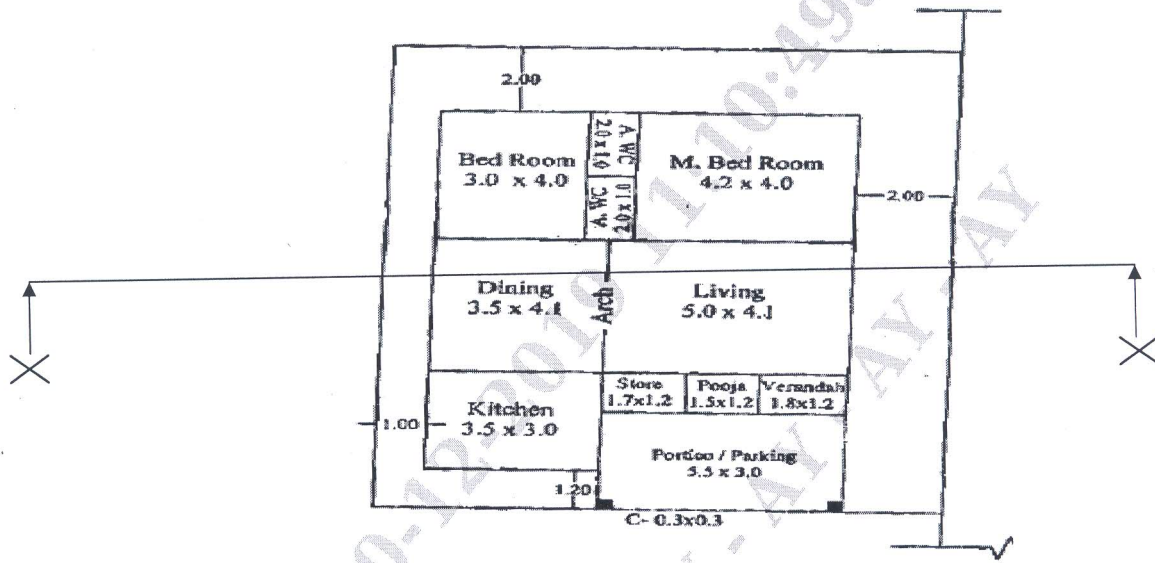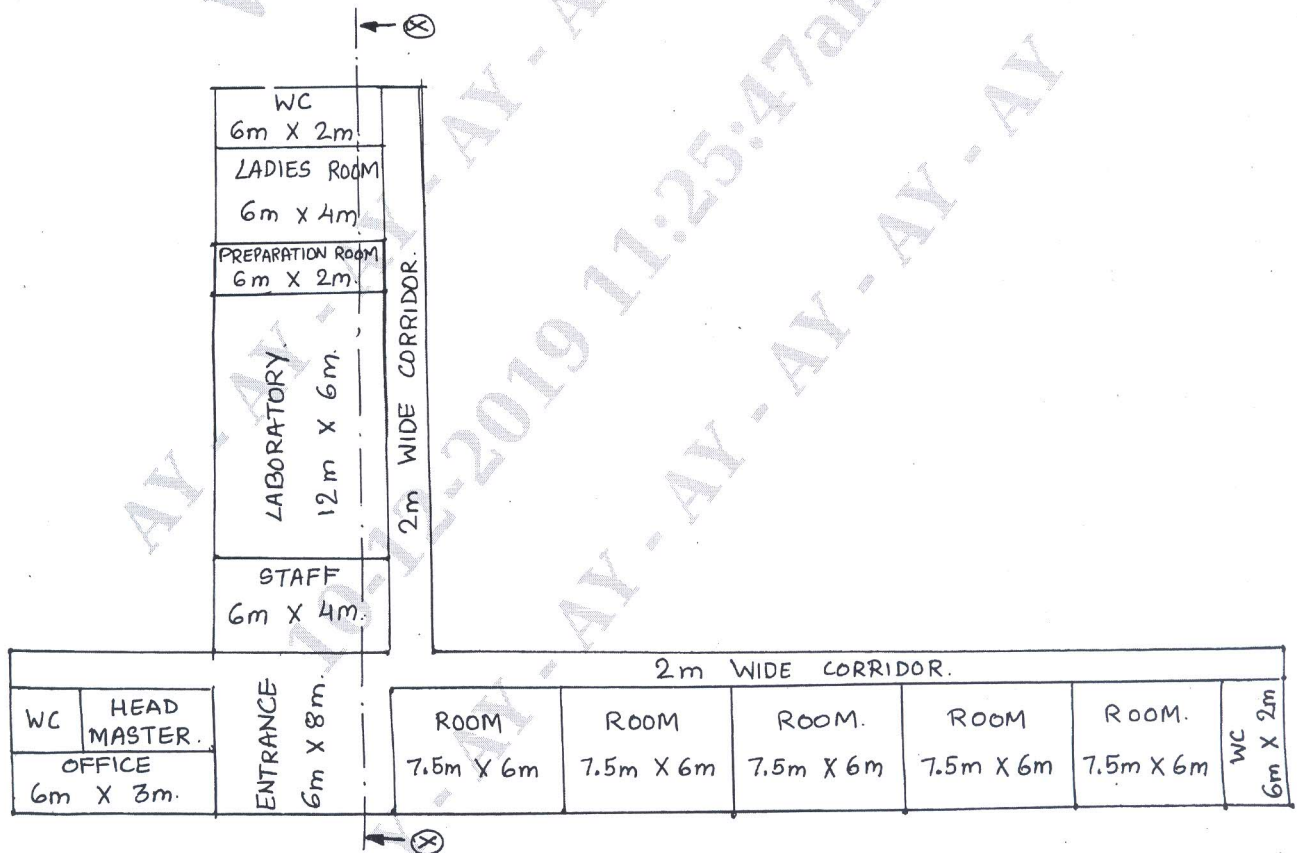　d. Schedule of openings.

(50 Marks)

Fig. Q3

Fig. Q4