CBCS SCHEME

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. A square RCC column 450X450 mm is resting on a sloped RCC square footing. The depth of foundation is 1.5 m below the ground level. The size of footing is 1400 ×1400mm.The depth of footing is reduced to 750 mm at the face of column to 300 mm at the edge of the footing. The column reinforcement consist of 8 bars of 20mm 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 .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.   (40 Marks)

OR

Q2. Draw the cross section and Plan of a RCC dog legged stair for a building having the following details. Clear stair hall size 2.5X4.5m, width of landing 1.2m, width of each flight 1.2m, Rise=150mm,Tread=150mm,Thickness of waist slab = 150mm Floor to floor height 3.6m.   (40 Marks)

Q3. The line diagram of a residential building is given in **Fig Q.3.** Draw to scale the following:
   a. Plan at sill level.
   b. Front elevation.
   c. Section along XX.
   d. Schedule of openings.

                                                                   (60 Marks)
OR

Q4. The line diagram of a residential building is given in **Fig Q.4.**Draw to scale the following:
   a. Plan at sill level.
   b. Front elevation.
   c. Section along XX.
   d. Schedule of openings.
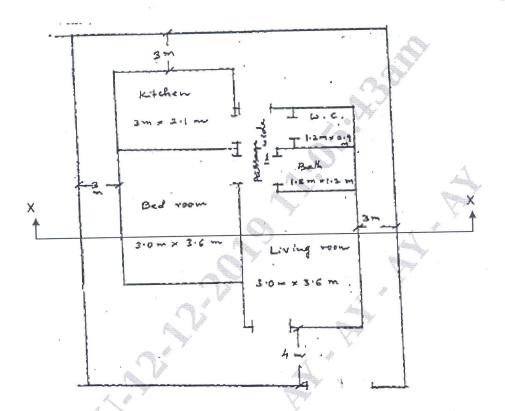
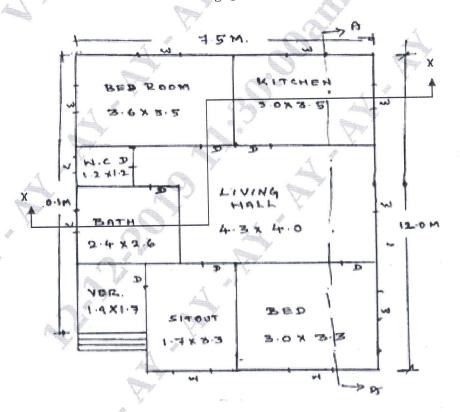   (60 Marks)

Fig Q.3

Fig Q.4.