Fifth Semester B. E. Degree Examination, December 2018
(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.   Draw plan, sectional elevation and cross section of a slab type combined footing with the given details:
        Size of columns = (400 x 400) mm
        Size of footing =2m x 4m
        Depth of footing = 600mm
        Centre to centre distance between the columns = 2m
        Thickness of PCC bed in 1:3:6 = 100mm
        Column reinforcement details – longitudinal steel of #8 - 20ϕ with lateral ties of 2L - 8ϕ @ 200 c/c
        Footing reinforcement details – bottom reinforcement of 12ϕ @ 100 c/c both ways and top reinforcement of 12ϕ @ 150 c/c both ways   **(30 Marks)**

OR

Q2.   Draw two consecutive courses for corner joints of the following walls in English bond.
     (a) One brick thick wall i.e., 200 x 200
     (b) One and half thick wall i.e., 300 x 300.   **(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 School building is given in figure Q4. Draw to scale the following:

     a.   Plan at sill.
     b.   Front elevation.
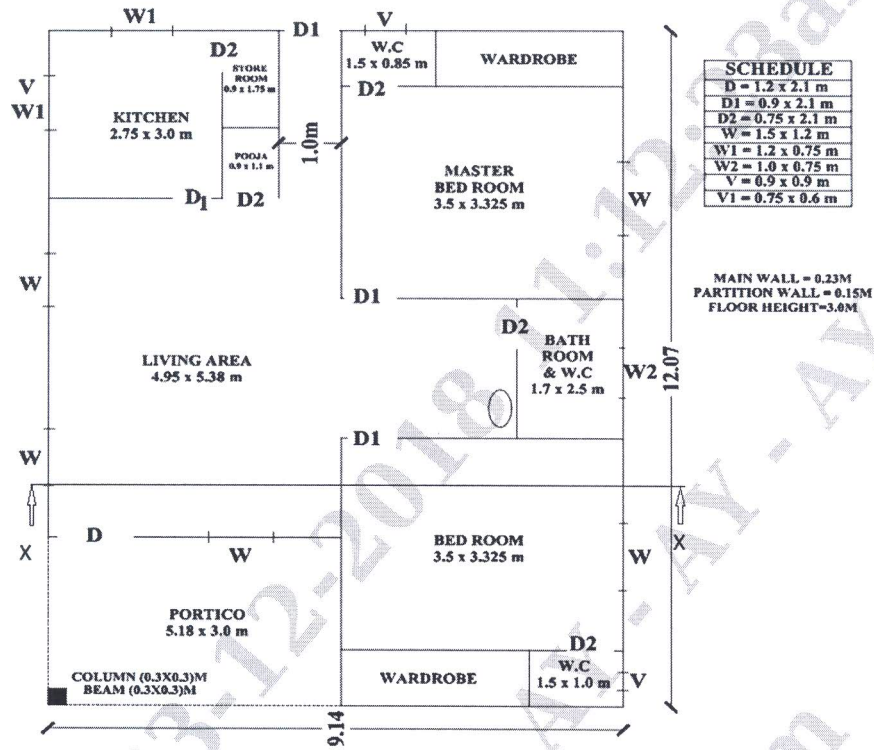   c.   Section along XX.   **(50 Marks)**

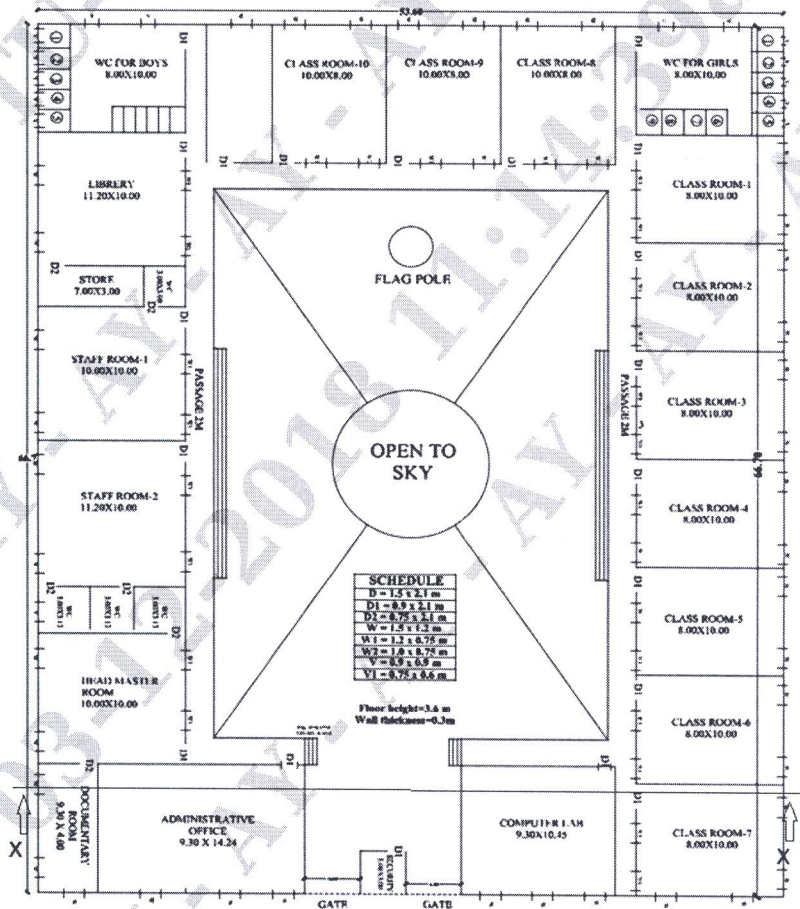Figure Q3. Line diagram of single storey residential building

Figure Q4. line diagram of single storey School building