4231

BOARD DIPLOMA EXAMINATION, (C-14)
MARCH /APRIL-2019
DCE - THIRD SEMESTER EXAMINATION

CIVIL ENGINEERING DRAWING-I

Time: 3 Hours   Max.Marks: 60

PART-A

5x4=20M

Instructions: 1) Answer all questions and each question carries 4 marks.

2) Draw the sketches not to scale.

3) Assume suitable data wherever necessary.

1) Draw the conventional signs for the following:

a) Concrete

b) Shower head

c) Exhaust fan

d) Wood (across-grain)

2) Draw the elevation of a panel door and label the parts.

3) Draw the site plan of a residential building to a plot of size 12mx18m and having 30 feet road on width side. Front and rear setbacks 6m and 2m respectively and side setbacks 1.5m each

4) Draw a line diagram of an Apartment building for one floor with 2 units @ plinthj area of 90m² to 120m² per units.

5) Draw the marking plan of a single room building of size 3.80mx3.40m having wall thickness 230mm and width of foundation 1200mm.

2x20=40 M

Instructions: 1) Answer all question and each carries 20 marks.
2) Assume suitable data wherever necessary.
3) The drawing must be to the scale.

6)   Draw the following views of a R.C.C slab building, whose line diagram is given in the Fig-1, to a suitable scale.

(a) Fully dimensioned plan.   (b) Cross- Section.

i)   Foundation: All the main walls are taken to a depth of 1100mm below ground level and rest on C.C(1:4:8) bed 1100mm wide and 200mm thick. The remaining portion consists of two footings 900mm and 700mm wide and equal height. The footings are R.R masonry in CM (1:6). Partition wall 100mm thick between toilets is over flooring.

ii)   Basement: 600mmx600mm-R.R masonry in CM(1:6)

iii)   Superstructure: 300mm thick - Brick masonry in CM (1:6). The height of floor is 3000mm to the bottom of the slab.

vi)   Lintels: 300mmx300mm

v)   Sunshade: Projected length -600mm, 75mm to 50mm thick - from fixed end to free end, on all external openings.

vi)   Roof Slab: R.C.C.$(1:1^{1/}_2 :3)$ 100mm thick.

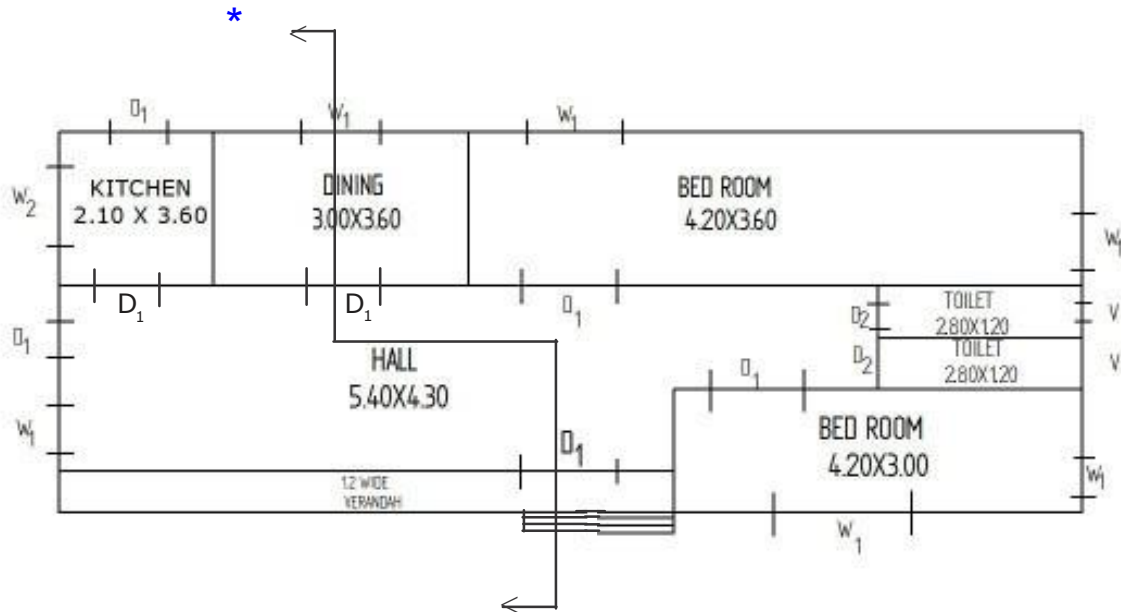vii)   Paraper wall: 120mm thick -Brick masonry in CM (1:6) and height 900mm

viii) Flooring: Tiles flooring over 100mm thick C.C(1:4:8)

xi)   Doors: D_1-1000mmx2000m D_2-800mmx2000mm

x) Windows :W_1-1200mmx1350mm W_2-1000mmx1350mm

xi) Ventilators: V-600mmx250mm

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7). Prepare the line diagram for primary school of 300 students with 10 class rooms with HM room, staff room and toilets etc. Assume suitable sizes of rooms with verandah 1.50m vide and show provision for play ground.

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