022

Code : 15CE35D

Register Number | | | | | | | | | | |

III Semester Diploma Examination, Oct./Nov.-2019

BUILDING PLANNING AND DRAWING

Time : 4 Hours] **[Max. Marks : 100**

Instructions : (i) Assume suitable data wherever necessary.

(ii) Drawing should be neat and fully dimensioned.

PART – A

Answer any five Questions **(5 × 2 = 10)**

1. What are the things to be avoided near the Building ?

2. Why the colours of Walls, Roofs, Doors and Windows should be lighter ?

3. What is meant by circulation in a building ? Give guidelines for suitable circulation in a building.

4. List the various factors to be considered for planning a Residential Building.

5. What is the floor area ratio ?

6. What is the difference between Key plan and Site plan ?

7. What do you mean by hazardous building ? Give an Example.

8. Mention the standard sizes of Doors and Windows for Residential Building.

PART – B (Compulsory)

9. Draw the following diagrams to a scale of 1:100. **(10 + 10 = 20)**

(a) Site plan by applying local building Bye-laws.

[Turn over

(b) Single line diagram for a residential building providing suitable room dimensions.

Site No- 51

Site Dimension – 9 m × 12 m

Orientation :

East – 9 m Road

North – Site No 50

West – Site No 90

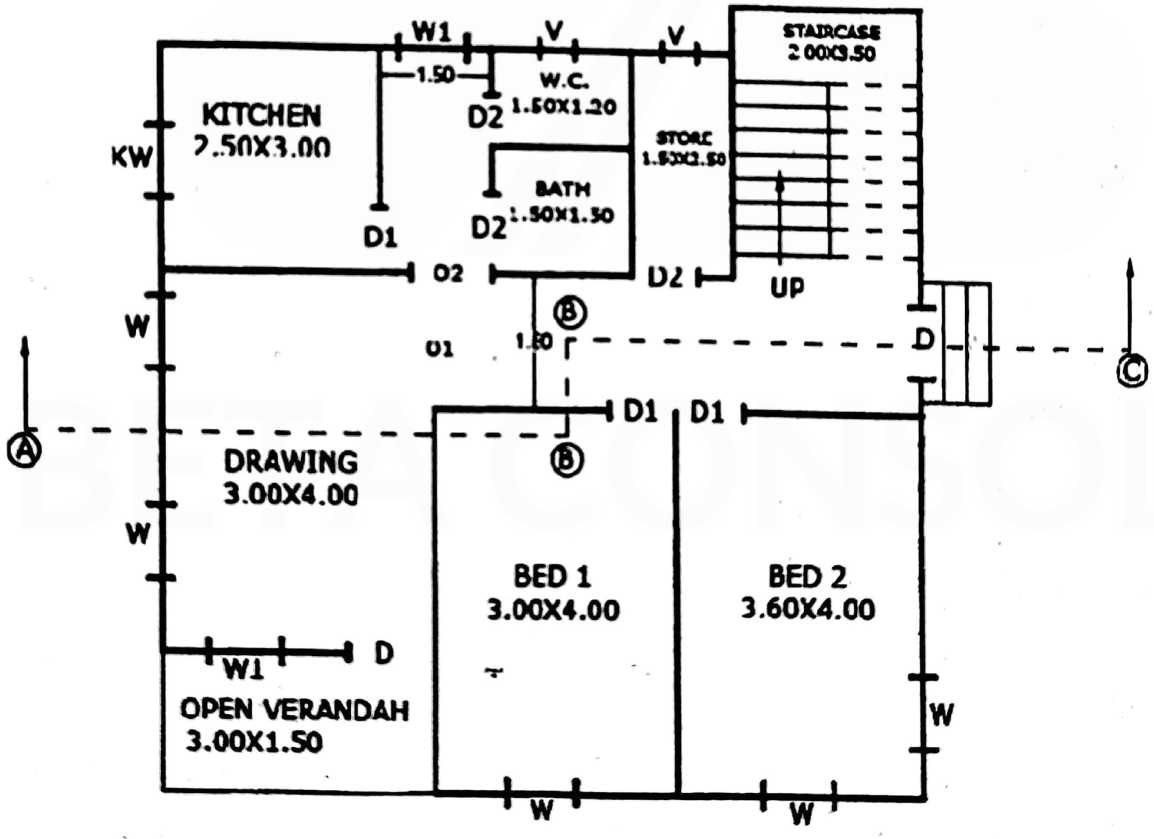
South – Site No 52

10. The line diagram shown in the figure for a proposed Residential Building with clear dimensions between inside walls. Draw to a scale of 1:100 the following views :

(a) Plan at Sill Level **20**

(b) Section @ ABC **20**

(c) Front Elevation **10**



All Dimensions are in "m"

Plan is Not to Scale

onstruction details & Specifications are as follows :

Foundation : 1000 mm wide & 1200 mm deep with Concrete bed 1 : 4 : 8 300 mm thick and two courses of size stone masonry in CM 1 : 8, 450 mm depth of each course

Basement : Dressed size stone masonry in CM 1 : 6, 450 mm wide 600 mm depth includes 150 mm PCC 1 : 3: 6

Super structure :

BBM in CM 1 : 6 of 300 mm thick for all walls

Sill 100 mm thick of PCC 1 : 3 : 6

RCC Lintel 200 mm thick of CC 1 : 2 : 4

RCC Chejja 600 mm wide, 150mm thick at support and 100 mm thick at end

RCC roof slab 150 mm thick of CC 1 : 2 : 4 at 3000 mm ceiling height

WPC 100 mm thick average

Marble flooring 20mm thick over a CC 1 : 4 : 8 bed of 100 mm thick

BBM in CM 1 : 6 Parapet wall of 150 mm thick, 750 mm height

Steps : Provide Suitable Rise & Tread

LEGEND

1.	DOOR	= D	= 1.10 × 2. 10 m
2.	DOOR	= D1	= 1.00 × 2. 10 m
3.	DOOR	= D2	= 0.80 × 2. 10 m
4.	WINDOW	= W	= 1.20 × 1. 30 m
5.	WINDOW	= W1	= 1.00 × 1. 30 m
6.	WINDOW	= KW	= 1.20 × 0. 90 m
7.	VENTILATOR	= V	= 0.90 × 0. 60 m
8.	OPENING	= O1	= 1.50 × 2. 10 m
9.	OPENING	= O2	= 1.00 × 2. 10 m

PART – C (Compulsory)

11. Draw the Electrical layout for the given line diagram of the building. **20**

OR

12. Draw the plan of shallow well Rain Water Harvesting Method for the given line diagram of the Building. **20**