1130

Code : 15CE35D

Register Number

III Semester Diploma Examination, Nov./Dec. 2018

BUILDING PLANNING & DRAWING

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

Note : (i) Answer any **five** questions in Part – **A**.

(ii) Part – **B** and Part – **C** are compulsory.

(iii) Assume missing data suitably.

PART – A

1. Define Building Bye-law. **2**

2. What is key plan ? **2**

3. What is sanction plan ? **2**

4. Define floor area ratio. **2**

5. What is possession certificate ? **2**

6. What is occupancy certificate ? **2**

7. Mention the set back distance for 9 m × 12 m size plot. **2**

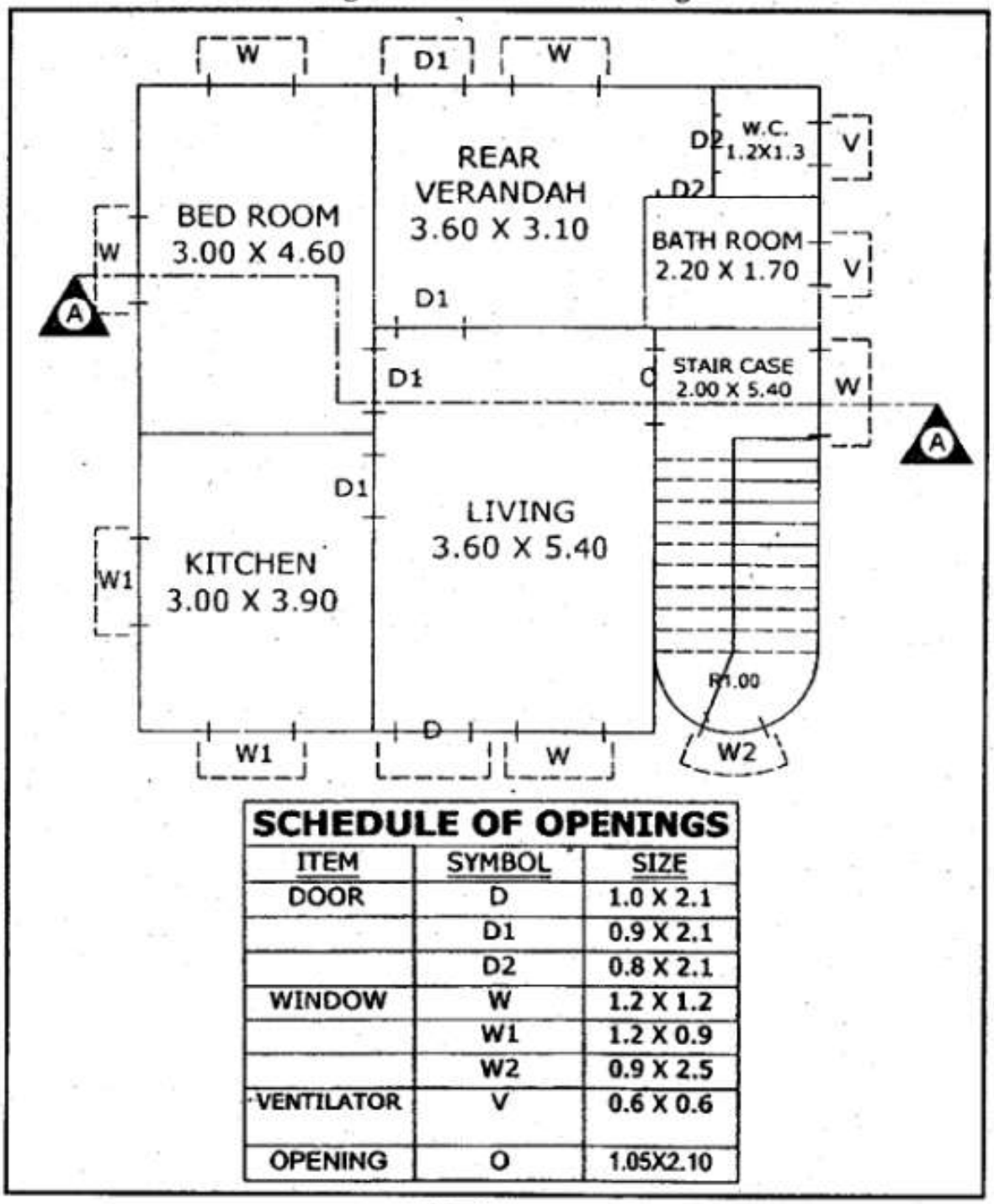
8. Define coverage. **2**

PART – B

9. Prepare plan, elevation and section of a residential building to a scale 1:50 with the following details. (Scale 1 : 50) **50**

Refer Line Diagram

Line diagram of Residential Building



SCHEDULE OF OPENINGS		
ITEM	SYMBOL	SIZE
DOOR	D	1.0 X 2.1
	D1	0.9 X 2.1
	D2	0.8 X 2.1
WINDOW	W	1.2 X 1.2
	W1	1.2 X 0.9
	W2	0.9 X 2.5
VENTILATOR	V	0.6 X 0.6
OPENING	O	1.05X2.10

(Fig. 01)

PART – C

10. Prepare and draw the line diagram of canteen building to a scale of 1:100, for the given details : **20**

Approximate Area of components

(1)	Restaurant Hall	–	84 m^2
(2)	Kitchen area	–	12 m^2
(3)	Service Area	–	18 m^2
(4)	Washing Area	–	9 m^2
(5)	Store	–	9 m^2
(6)	Staff service Area	–	22 m^2
(7)	Toilet (Ladies / Gents)	–	16 m^2
(8)	Entry Foyer	–	12 m^2

Given areas are approximate values. Prepare line diagram using the above areas and show the openings.

Assume standard sizes for Doors and Window openings.

11. Draw the plan and longitudinal section of septic tank with the following details : **20**

Inner dimensions	:	5 m × 2 m
Wall thickness	:	0.3 m
Battle wall	:	100 mm thick and 450 mm height with 150 mm above the water level at 1 m from inlet face of the wall.
R.B. stand wall	:	100 mm thick wall with 0.3 m × 0.3 m openings upto 150 mm above water level at 1.5 m from outlet face well.
Total depth	:	1.75 m at the center
Water depth	:	1.5 m
Bed concrete	:	0.2 m minimum depth & having floor Slope of 1 in 20.
RCC cover slab	:	100 mm thick

provide Iron foot steps, vent pipe, manhole cover and inlet and outlet 100 mm diameter SW pipe suitably.

OR

Show the plumbing and sanitary details for the Residential building Q No : 09. (Need not draw separate plan)

Foundation :

Size of foundation : 1.1 m × 1.1 m

C.C. bed 1:4:8 ; 200 mm thk.

Size stone Masonry in CM 1:6.

First Course	:	900 mm width
	:	450 mm depth
Second Course	:	700 mm width
	:	450 mm depth
Basement	:	500 mm width
	:	500 mm depth
DPC	:	1:2:4 cement concrete of size 500 mm width and 100 mm thickness.

Super structure :

(1) Wall : BBM in CM 1 : 5 of thickness 300 mm.

(2) Sill : PCC 1:3:6, 100 mm thick

(3) R.C.C. : Lintel 150 mm thick of CC 1:2:4 at all openings.

(4) R.C.C. : Chejja 450 mm wide, 100 mm thick at support and 50 mm at the end.

(5) R.C.C. roof slab. 150 mm thick of CC 1:2:4 at 3 m ceiling height.

(6) Granite flooring 20 mm thick over CC 1:4:8 bed of 100 mm thick.

(7) WPC 100 mm average thickness over the roof slab.

(8) Parapet wall with BBM in C.M. 1:5, 150 mm thick and 600 mm height.

(9) Coping 40 mm thick, 200 mm width in C.M. 1:4.

(10) Staircase head room ceiling height is 2.4 m. Don't provide parapet for staircase head room.