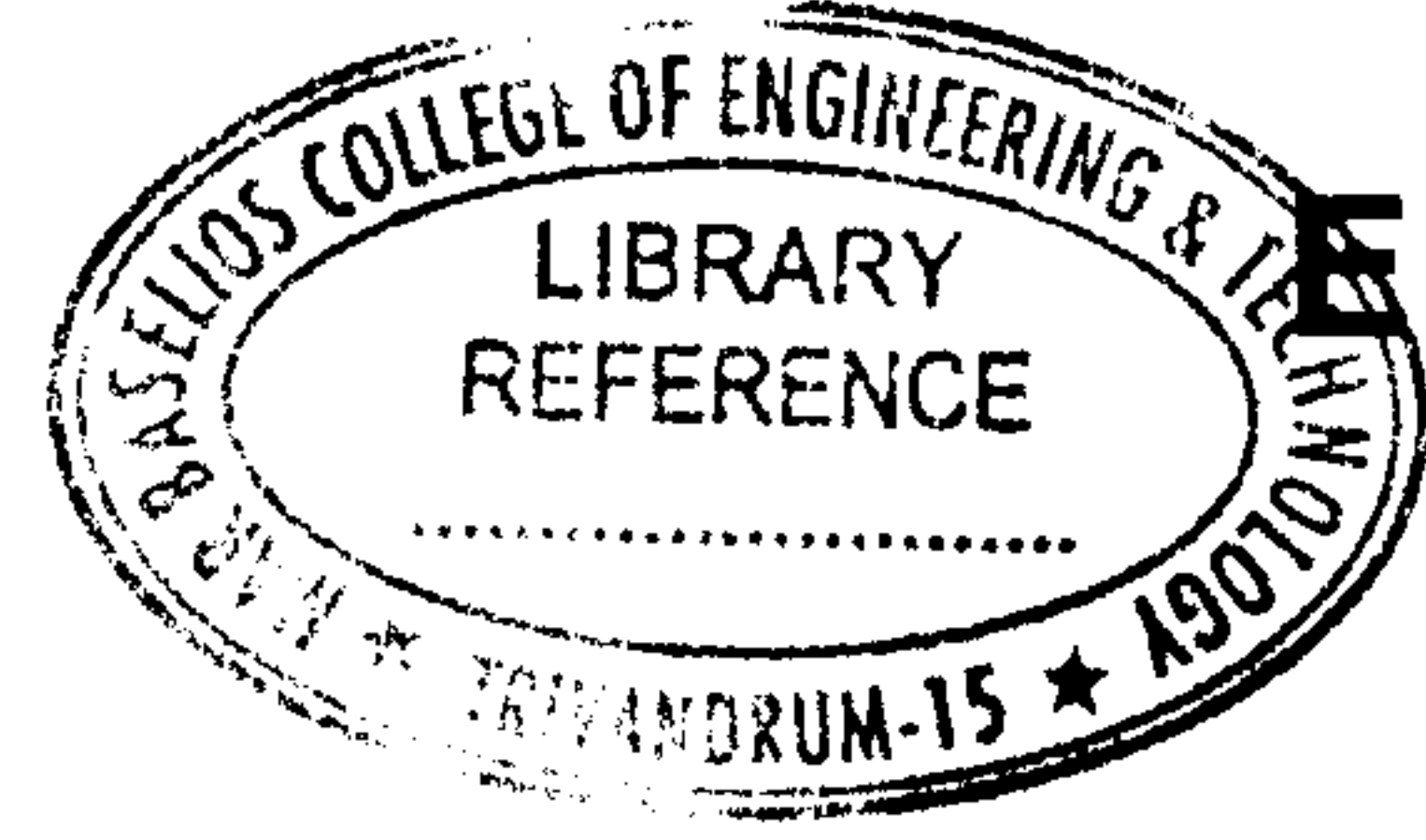




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E - 4174

Reg. No. :

Name :

**Fourth Semester B.Tech. Degree Examination, August 2018
(2013 Scheme)**

13.406 : BUILDING, PLANNING AND DRAWING (C)

Time : 3 Hours

Max. Marks : 100

PART - A

Answer **all** questions.

1. List the different types of buildings.
2. Make a brief note on setback rules for a residential building as mentioned in KBR.
3. List the prohibited activities in CRZ-I.
4. List the different types of estimate.
5. Illustrate a rain water harvesting system for a building. **(5x4=20 Marks)**

PART - B

Answer **one** question from **each** Module.

Module - 1

6. Explain the different factors that are taken into account in the process of development of concept for a residential building.

OR

7. Describe the areas included under the different categories of CRZ. **20**

P.T.O.



Module - 2

8. Estimate the following quantities referring to Fig. 1 :

- Earth Work Excavation
- P.C.C. in foundation
- R.R. Masonry in foundation
- R.R. Masonry in basement.

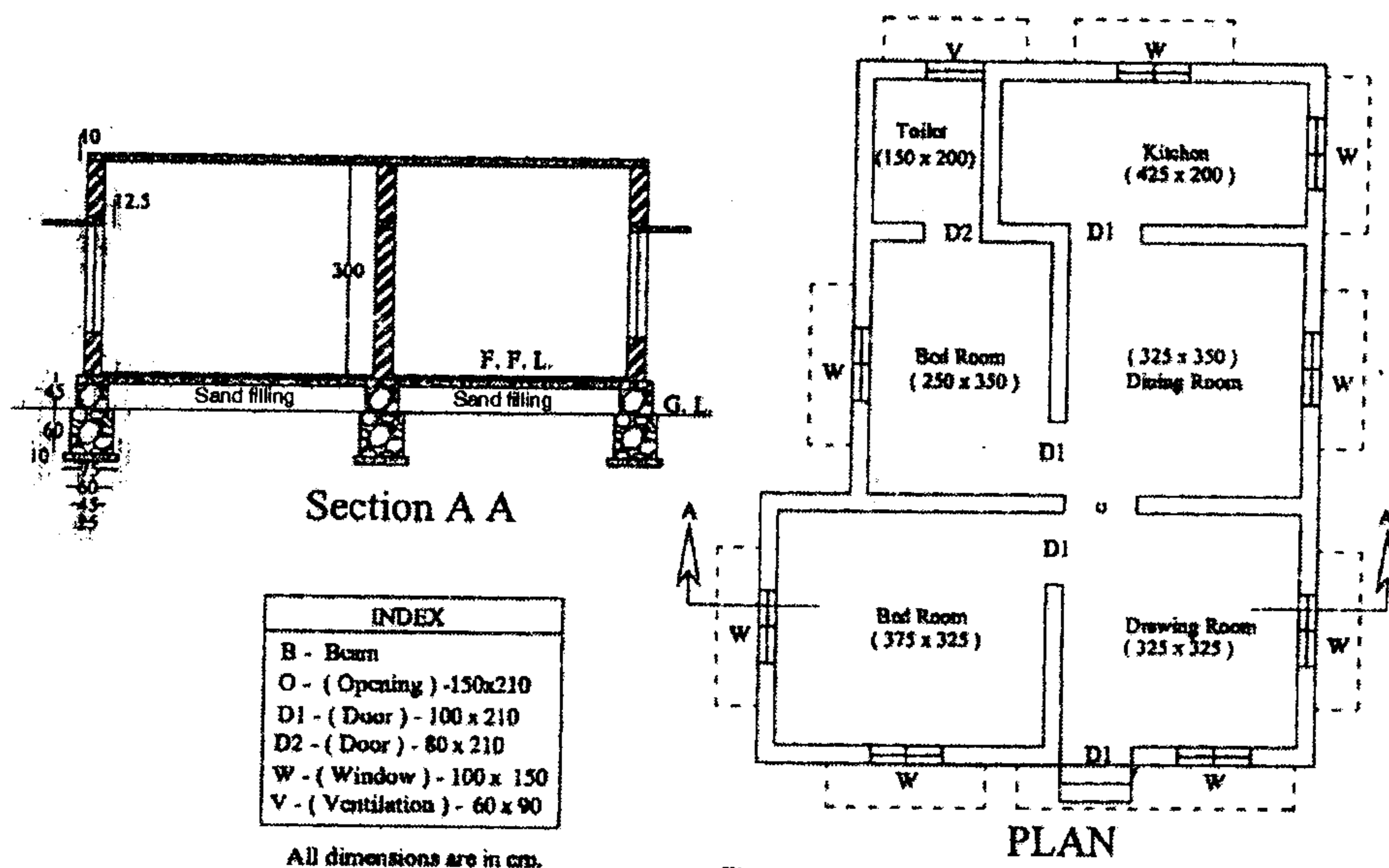


Fig.1

OR

9. A plot in the commercial zone in an urban area is 24x45 m in size. Compute the number of floors and area in each floor considering the following data :

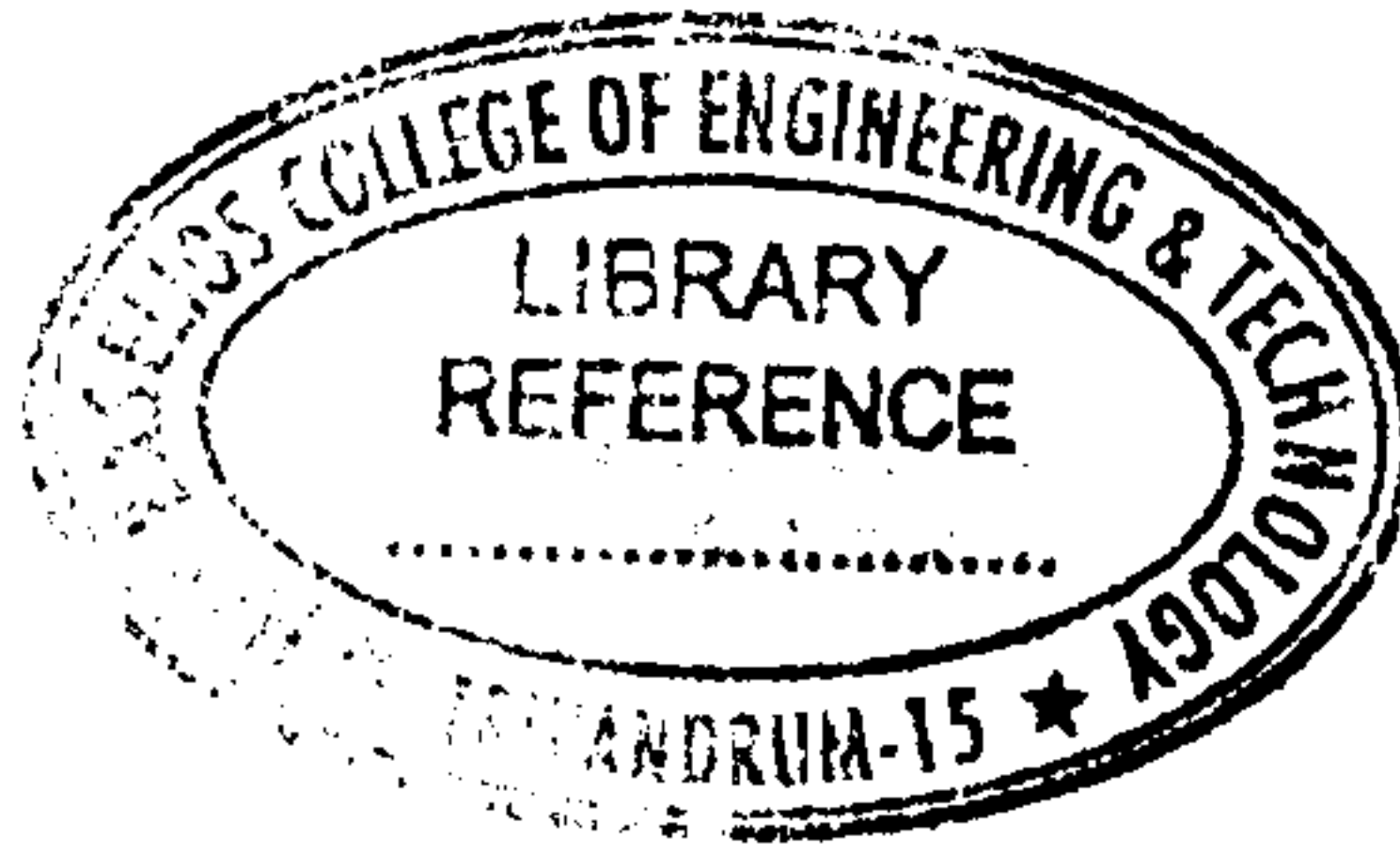
FAR = 2, Coverage = 60%, Front Setback = 3 m, Rear Setback = 1.5 m, Side Setbacks = 1.5 m on each side.

20

Module - 3

10. Draw, to suitable scale, the following of a residential building referring to the line sketch given in Fig 2 :

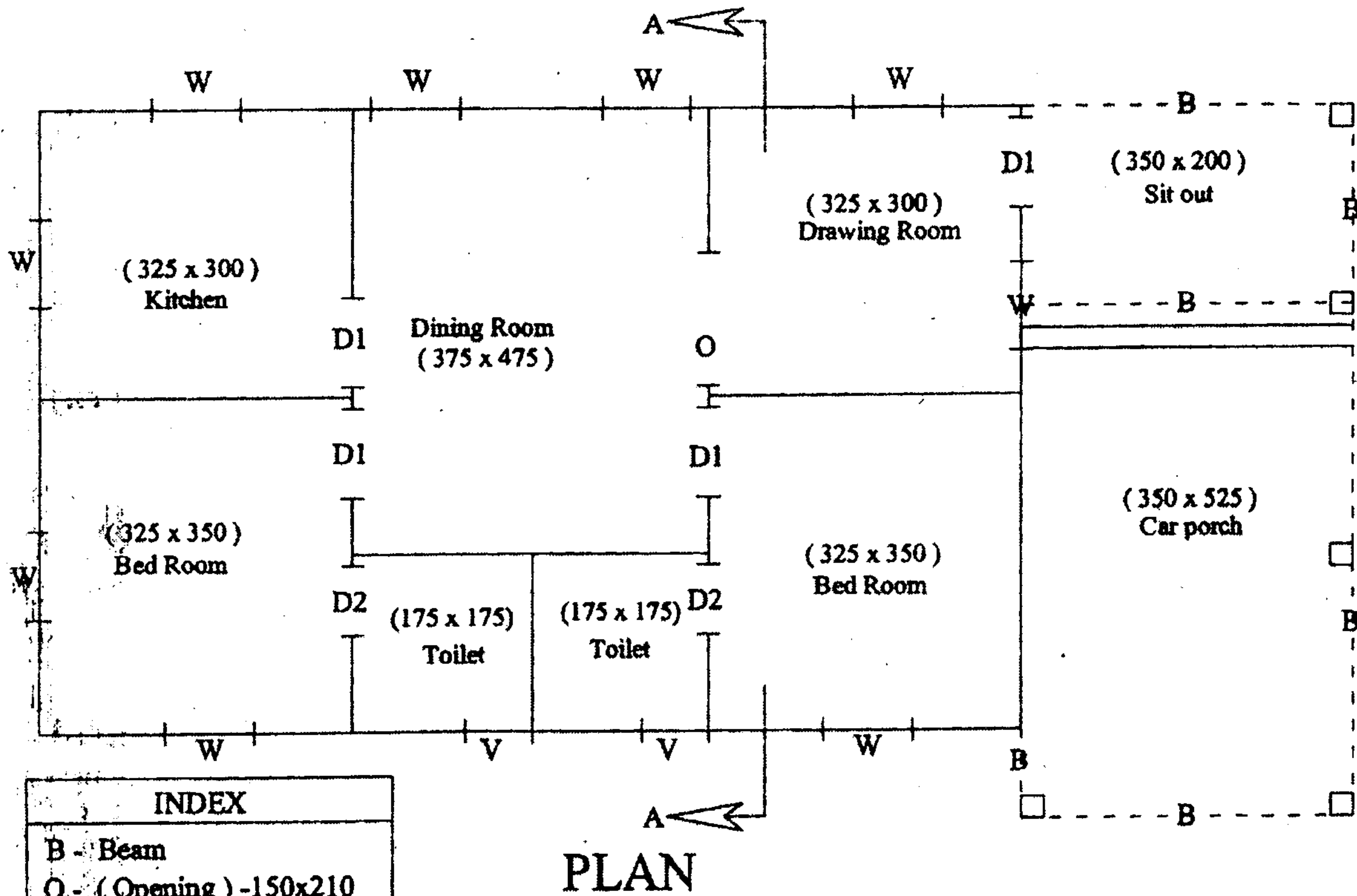
- Sectional Plan at sill level
- Sectional Elevation on AA
- Front Elevation.



Specifications :

- Foundation : Provide wall footings using RR Masonry of size 60x60 cm over a PCC bed of 75x10 cm.
- Basement : Provide RR Masonry size 45x45 cm.
- Lintels : RCC lintels of suitable sizes may be provided wherever necessary.
- Roof : Flat RCC slab in M20 mix 10 cm thick.
- Walls : Brick masonry 25 cm thick to a minimum height of 400 cm.
- Doors and Windows : Assume suitable sizes.

Assume all missing data suitably.

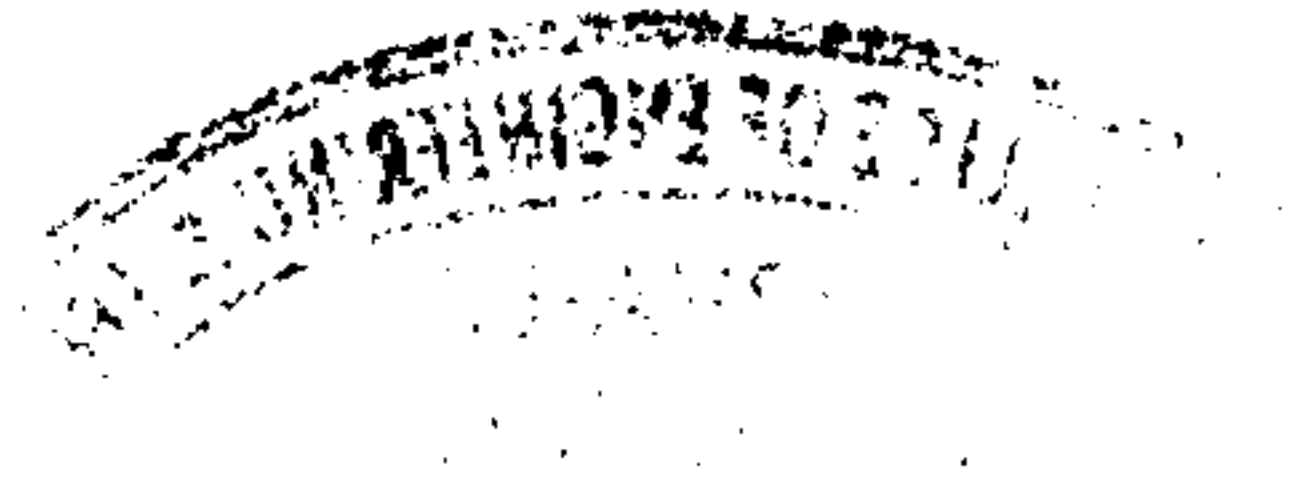


INDEX	
B	- Beam
O	- (Opening) - 150x210
D1	- (Door) - 100 x 210
D2	- (Door) - 80 x 210
W	- (Window) - 100 x 150
V	- (Ventilation) - 60 x 90
All dimensions are in cm.	

PLAN

Fig.2

OR





11. Draw, to suitable scale, the following of a commercial building referring to the line sketch given in Fig 3 :

- Plan-Ground Floor
- Plan-First Floor
- Sectional Elevation on AA
- Front Elevation.

Specifications are as follows :

- Foundation : Provide column footings of size 90×90 cm over a PCC bed of 110×20 cm.
- Basement : Provide RCC beam of size 45×60 cm.
- Lintels : RCC lintels of suitable sizes may be provided wherever necessary.
- Roof : Flat RCC slab in 1:2:4 mix 12 cm thick.
- Walls : Brick masonry 10 cm thick to a minimum height of 400 cm.
- Doors, Windows and Rolling Shutters etc: Assume suitable sizes.

Assume all missing data suitably.

