



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, January 2018
(2013 Scheme)**

13.801 : QUANTITY SURVEYING AND VALUATION (C)

Time : 3 Hours

Max. Marks : 100

Instruction : Assume any missing data required.

PART – A

Answer **all** questions :

1. What is conveyance of material ?
2. Differentiate detailed estimate and abstract of estimate.
3. Explain the advantages of Bar Bending Schedule.
4. Differentiate book value and market value.
5. What are outgoings ?

(5×4=20 Marks)

PART – B

Answer **any one full** question from **each** Module, questions from Module-I and IV carries **15** marks each, Module II and III carries **25** marks **each**.

Module – I

6. a) Explain the use of Data book and Schedule of Rates. **7**
b) Write down the detailed specification of Reinforcement work for RCC work. **8**
7. Analyse the rate for the following items :
 - i) PCC 1:3:6 using 40 mm broken stone; 40 mm aggregate 0.95m³
@1100/m³, Sand 0.48m³ @ 2500/m³, Cement 228kg@7500/t. **7**
 - ii) Rubble masonry in CM 1:6; Rubble 1m³@900/m³, sand 0.3m³ @
Rs. 2,500/m³, Cement 72 kg@ Rs. 7,500/t, Labour - 0.7 Mason @ Rs. 800
each, 0.35 Man @ Rs. 600 each, 0.70 Women @ Rs. 550 each. **8**

P.T.O.



Module - II

8. Prepare a detailed estimate of quantity of the following item of a building given in the Figure-1.

- i) Earth work excavation
- ii) Brick work for superstructures
- iii) Wood work for shuttering of doors
- iv) Wall Plastering
- v) RCC work for Roof and Lintel.

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9. Prepare a detailed estimate of quantity of the following item of a building given in the Figure-1.

- i) PCC 1:4:8 for foundation
- ii) Rubble masonry foundation and basement
- iii) Wood work for frame of door and windows
- iv) Wall painting.

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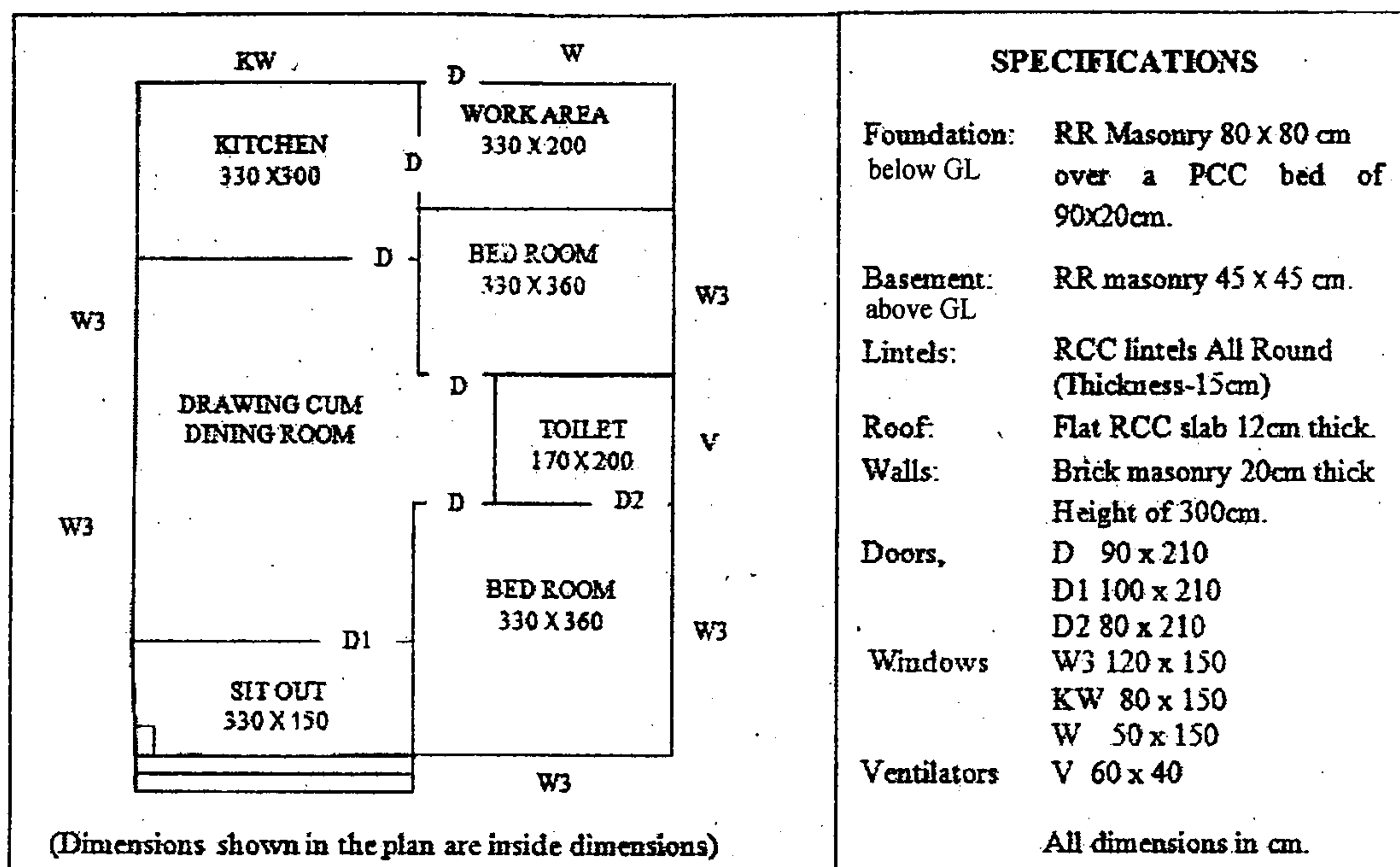


Figure - 1



Module - III

10. Prepare bar bending schedule of a RCC column with foundation footing shown in the figure 2.

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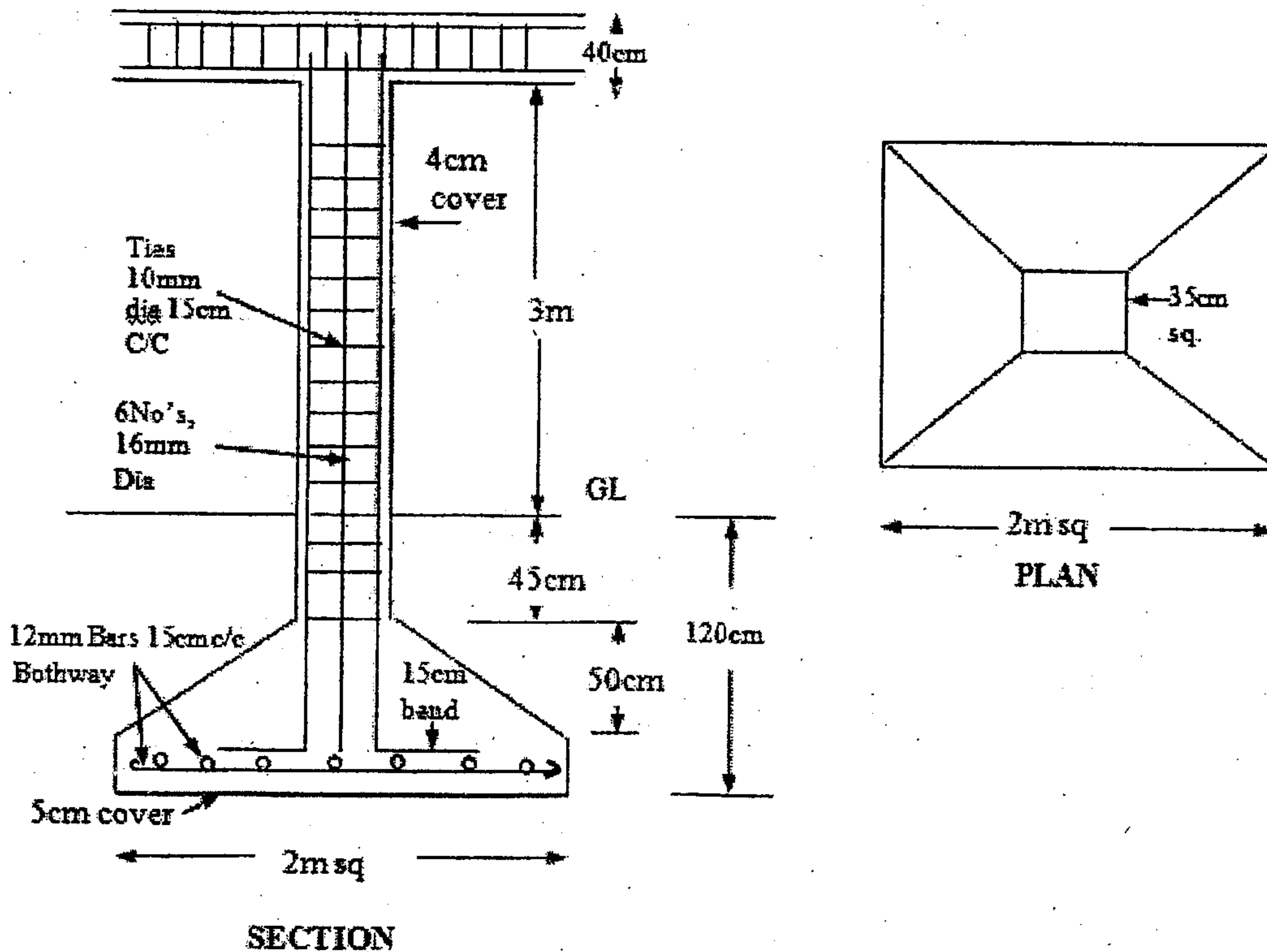


Figure - 2

11. Prepare a bar bending schedule of reinforcement of a rectangular RCC beam having clear span 4.5 m and resting on 30 cm thick walls.

- Width of the beam = 30 cm
- Effective depth of beam = 35 cm
- Overall depth of beam = 40 cm
- Main reinforcement (tension) = 4 Nos., 20 mm ϕ bars
(Two bars are bent-up at 1/7 of span)
- Stirrup holders = 2 Nos. of 12 mm ϕ
- Stirrups = 6 mm ϕ @ 15 cm c/c
upto 4/7 of span and 25 cm c/c in the remaining portion.
- Suitable cover for reinforcement may be assumed.

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**Module – IV**

12. a) Explain the principles of valuation. 5
- b) A building costing ₹ 4,50,000/- has recently been constructed in a big city. The plot measuring 450 m² was purchased @ ₹ 1,500/m². Work out the rent of the property. Assume 7% as net return on the cost of construction and 4% in the land value. All expected outgoing are ₹ 1,50,000/year. 10
13. a) Differentiate Gross rent and Net rent. 5
- b) A building whose plinth area is 800 m² was constructed 10 years ago having the cost of land ₹ 5,00,000/-. Find the capitalised value allowing for depreciation etc. In case this building need immediate repair of ₹ 25,000/-. What is the value of the building ? Take the present cost of construction ₹ 1,000/m². The rate of interest is 6% for depreciation and future life of building 50 years. 10
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