



(Pages : 4)



Reg. No. :

Name :

Eighth Semester B.Tech. Degree Examination, December 2017
(2008 Scheme)
08.804 : QUANTITY SURVEYING AND VALUATION (C)

Time : 3 Hours

Max. Marks : 100

Instructions : Answer *all* questions in Part – **A**. Answer *one* question from *each* Module in Part – **B**. Assume any missing data suitably.

PART – A

(4×5=20 Marks)

1. State the difference between revised estimate and supplementary estimate. Explain the circumstances under which such estimates are prepared.
2. Write short notes on data book and schedule of rates.
3. Briefly explain Bar bending schedule. State its uses.
4. Name different methods of valuation. Explain any one method in detail.

PART – B

(1×15=15 Marks)

Module – I

5. a) Write the detailed specification for first class brick work used in residential building construction. 5
- b) Work out the unit rate for the following work in m³-reinforced cement concrete M20 grade. 10

Description	Quantity	Unit	Rate Rs.	Unit
20 mm (nominal size) broken stone	0.900	m ³	1463.00	m ³
Sand	0.450	m ³	2238.00	m ³
Cement	0.360	tonne	4934.00	tonne
Mason	0.200	Nos	325.00	Each
Man	1.000	Nos	240.00	Each
Woman	3.500	Nos	240.00	Each
Man for lifting materials	0.200	Nos	240.00	Each
Form work	7	m ²	3623.94	m ²

OR

P.T.O.



6. a) Write down the detailed specification for the following item : Damp proof course 2.5 cm thick, with CC 1 : 1.5 : 3. 5
- b) What is the necessity of specifications for building materials and construction. 5
- c) Work out the unit rate for the following work in m² - Painting two coats with approved quality plastic emulsion paint two coats. 5

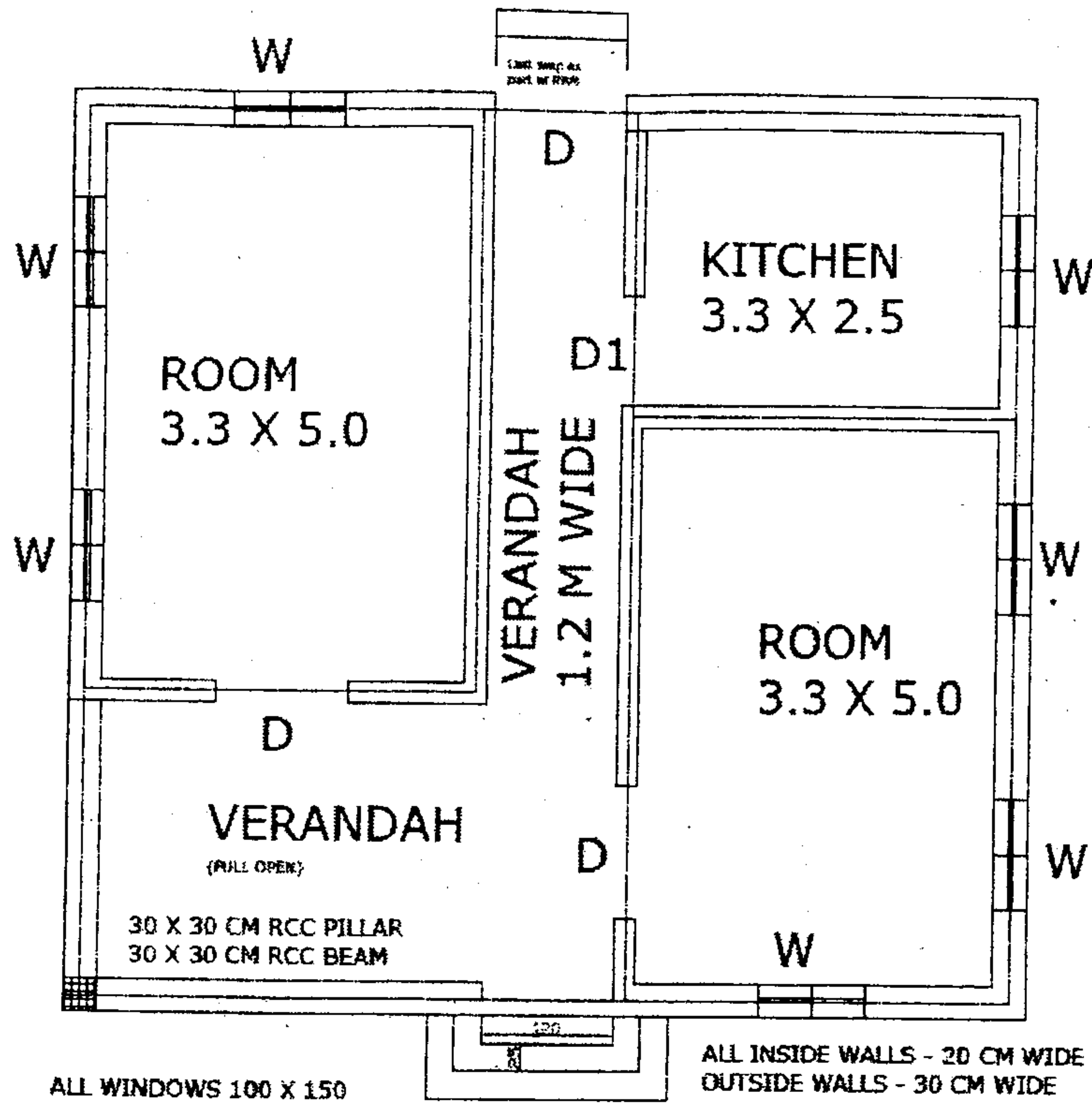
Materials	Qty	Unit	Rate/Unit
Plastic emulsion paint including priming coat	1.150	Litre	180.00
Labour			
Painter	1.150	Each	270.00

Module – II

(1×50=50 Marks)

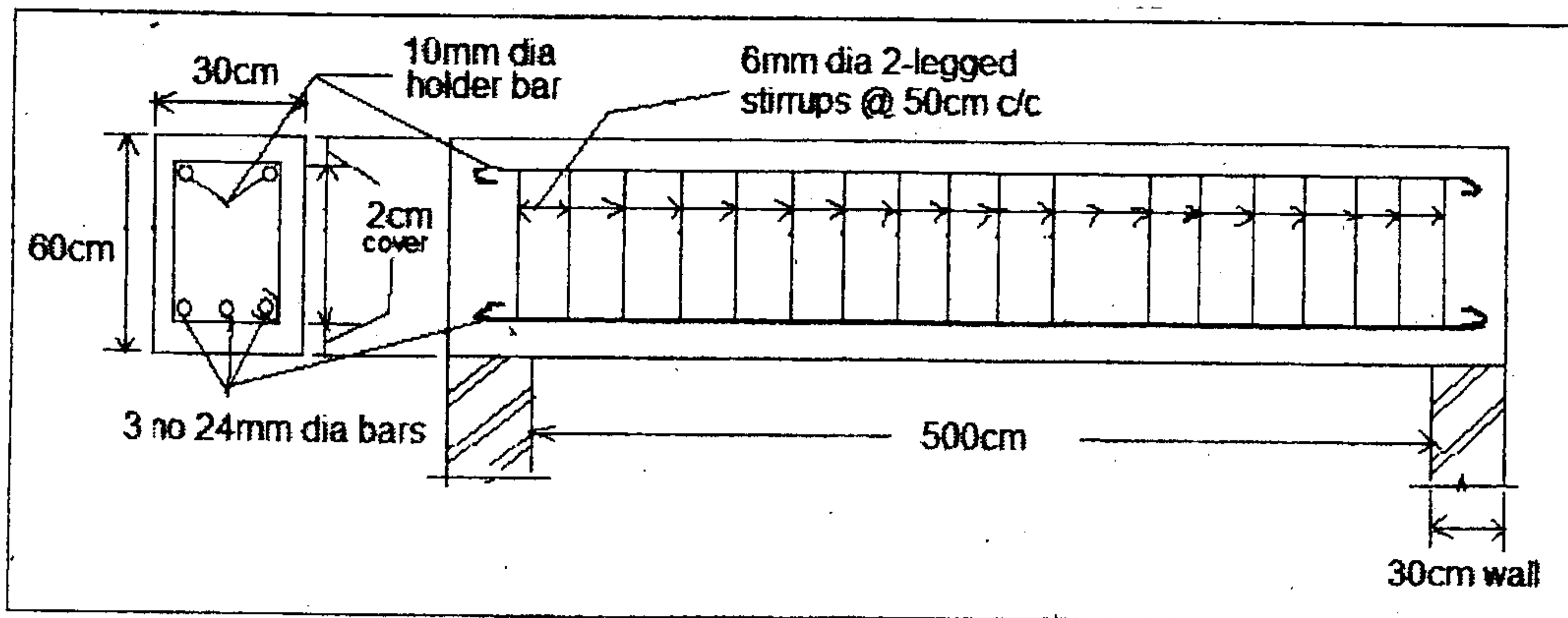
7. Obtain the quantity for the following items for fig. 1 and also prepare an abstract of estimate with given rates. Assume suitable missing data. 50
- a) Earth work in excavation – rate – Rs. 350/m³. Excavation depth 0.9 m from ground level, width 0.9 m
- b) RRM in foundation and basement – rate – Rs. 8,000/m³ – RRM using cm 1 : 6, 70 cm width 80 cm depth in foundation and basement 45 cm wide and 45 cm height except at front verandah column.
- c) Brick work – rate – 6000/m³. Brick work using country burnt bricks and cm 1 : 4, 20 cm thick and 3 m height. Parapet 10 cm wall 60 cm height.
- d) Cement plastering exterior and interior – Rs. 300/m².
- e) RCC M20 used in all structural elements. @Rs. 10,000/m³.

All interior walls 20 cm wide and exterior walls 30 cm wide. Doors and windows : D – 1.2 m × 2.1 m, D1 – 1.0 × 2.1 m; W – 1.0 × 1.5; Lintel – 0.23 × 0.15 m provided over openings with 10 cm projections. Sunshade 60 cm projecting all-around with lintel support. Assume any missing data. Front verandah consists of RCC column 30 cm × 30 cm with 1.2 × 1.2 × 0.5 m footing size resting at 1.1 m from ground level. RCC beam 30 cm × 30 cm.



OR

8. a) Fig. shows the longitudinal section and cross section of a simple beam of clear span 5.0 m. The thickness of supporting wall is 30 cm. Work out the total quantity of cement concrete and steel reinforcement (T or steel). **20**





- b) Prepare a detailed estimate of a septic tank for 20 users. Assume liquid capacity per user – 0.09 m^3 . Determine quantity for 30
- a) Earth work in excavation
 - b) PCC 1 : 3 : 6
 - c) Brick work in CM 1 : 6
 - d) RCC work – M20.

Module – III

(1×15=15 Marks)

9. a) A building costing Rs. 8,00,000/- has been constructed on a freehold land measuring 200 sqm recently in a big city. Prevailing rate of land in the neighbourhood is Rs. 250/- per sq.m. Determine the net rent of the property, if the expenditure on an outgoing including sinking fund is Rs. 34,000/- per annum. Work out also the gross rent of the property per month. 9
- b) Explain how depreciation in building is worked out. 6

OR

10. a) Calculate standard rent of a building with the following data :
- i) Cost of land = Rs. 8,00,000/-
 - ii) Cost of building = Rs. 5,00,000/-
 - iii) Expected life of building = 60 years
 - iv) Return expected = 6% on land 9% on building
 - v) Annual repairs = @ 12% on the cost of building
 - vi) Sinking fund = @ 30 of the return from building. 8
- b) A real estate agent purchases a vacant land of extent 10 hectares at a cost of Rs. 300 per m^2 . He divides the land into building plots of 900 m^2 area after leaving 25% of the land for roads, parks etc. Expenses for the development are at Rs. 1,500 per m^2 and technical charges at 8% of cost price. Work out the selling price of each plot if the agent expects 20% profit for his investment. 7