



CBCS SCHEME

17CV81

Eighth Semester B.E. Degree Examination, Jan./Feb. 2023 Quantity Surveying and Contracts Management

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 Prepare a detailed estimate of a R.C.C. column with foundation footing from the given drawing Fig.Q1.

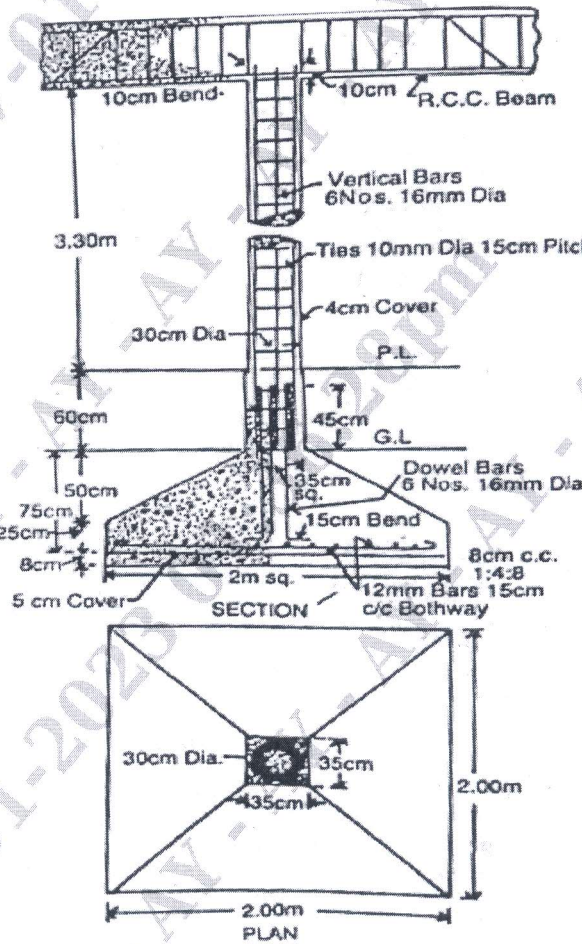


Fig.Q1

Assume rate of cement concrete as Rs.8000/m³ and steel Rs.75/kg.

(20 Marks)

OR

- 2 The details of residential building is shown in Fig.Q2. Estimate the quantities and the cost of the following items of works.
- Earthwork excavation for foundation in ordinary soil @ Rs.300/m³.
 - SSM in foundation and basement in CM 1:6 @ Rs.3000/m³.
 - BBM in superstructure in CM 1:6 @ Rs.7000/m³.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42+8 = 50, will be treated as malpractice.

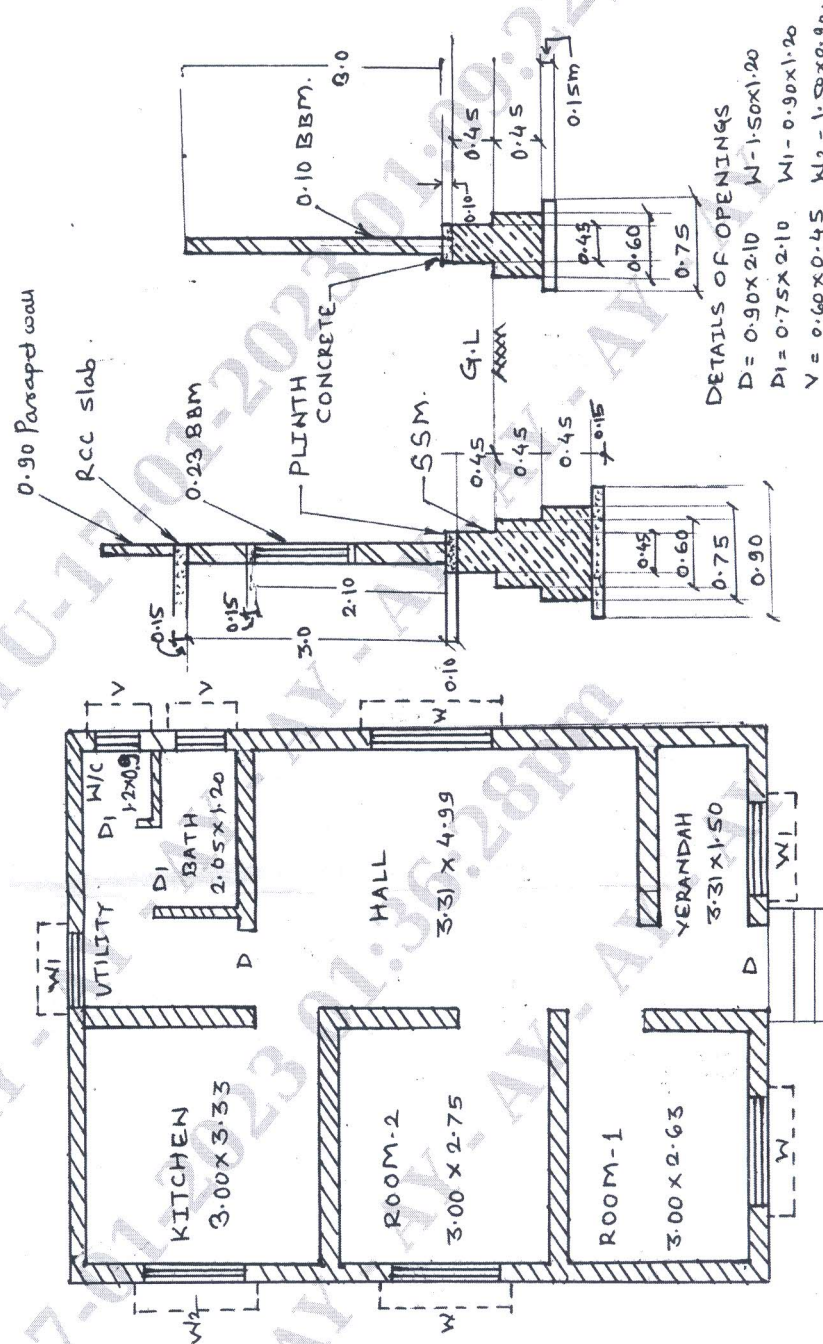
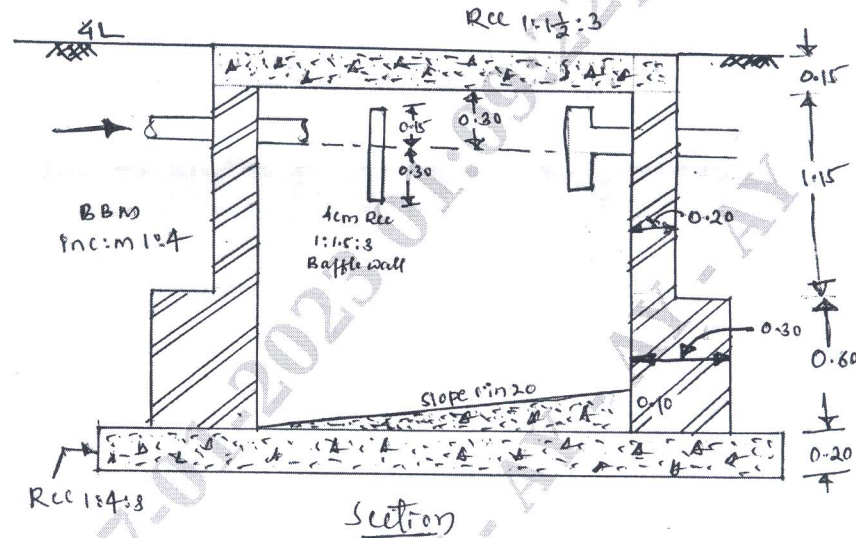


Fig.Q2

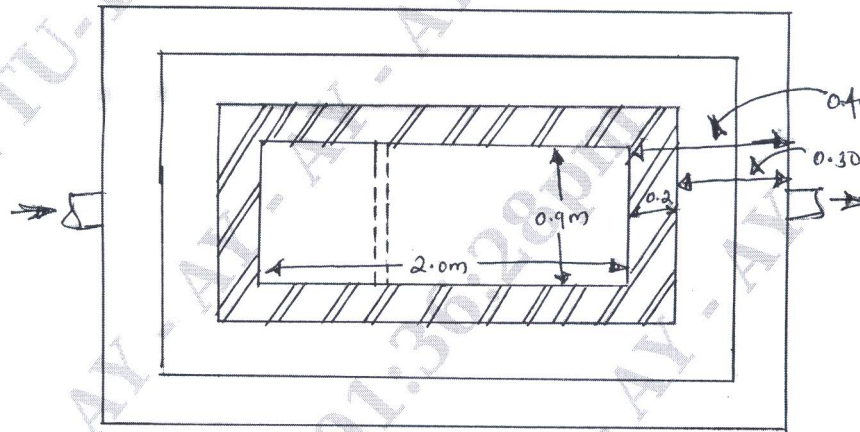
(20 Marks)

Module-2

- 3 The details of septic tank are shown in the Fig.Q3. Estimate the quantities for the following items of work and cost of abstract.
- Earth work in excavation for foundation @ Rs.300/m³.
 - BBM in CM 1:4 for side walls @ Rs.7000/m³.
 - Plastering for internal walls in CM 1:5 @ Rs.200/m².
 - RCC 1: 1½ : 3 for cover slab @ Rs.4000/m³.



Section



Plan

Fig.Q3

(20 Marks)

OR

- 4 Estimate the quantity of earthwork from chainage 20 to 26 measured with a standard 20 m chain from the following data adopting average end area formula.

Chainage (M)	20	21	22	23	24	25	26
Ground level	88.10	87.74	87.80	88.20	90.75	90.20	89.98
				90.40			

The formation level at chainage 20 is 88.50 m and the road has a rising gradient of 1:100. The formation width of the road is 10 m and side slopes in cutting 1:1 and booking 2:1.

(20 Marks)

Module-3

- 5 Write the specification for the following:

- Cement concrete 1:2:4 for roof slab.
- Damp proof course 2.5 cm in CC 1:1.5:3.
- Painting on Woodwork.
- Mosaic or Terrazzo Floor

(20 Marks)

OR

- 6 Analyze rates from first principle for the following:
- (i) 20 mm thick plaster for walls with CM 1:6.
 - (ii) CC 1:1.5:3 for beams with 2% steel.
 - (iii) Random rubble masonry for foundation in CM 1:8.
 - (iv) First class BBM in CM 1:4 for superstructure.
- (20 Marks)

Module-4

- 7 a. What are the advantages and disadvantages of Cost Plus Fixed Fee Contract? (08 Marks)
- b. Define: (i) Quotation (ii) Security Deposit (iii) Work charge establishment (06 Marks)
- c. Explain briefly "The piece work agreement". (06 Marks)

OR

- 8 a. List the elements of standard tender document. (06 Marks)
- b. Explain measurement book and nominal muster roll. (08 Marks)
- c. Discuss the circumstances for termination of contract and laws binded for it. (06 Marks)

Module-5

- 9 a. Define:
- | | | | |
|---------------------|--------------------|------------------------|------------|
| (i) Obsolescence | (ii) Salvage value | (iii) Mortgage | |
| (iv) Years purchase | (iv) Annuity | (vi) Capitalised value | (06 Marks) |
- b. Differentiate between market value and book value. (06 Marks)
- c. Describe the factors affecting the value of a property. (08 Marks)

OR

- 10 a. Write short notes on:
- (i) Compensation for delay in completion
 - (ii) Secured Advance Payment
 - (iii) Final Payment
- (12 Marks)
- b. Calculate the value of a property leased on a ground rent of Rs.800 per month. The lease has to run for 15 years. The net Rack rent of the property is Rs.2000 per month. Assume ground rent secured at 6% p.a. for reversionary value, interest @ 8% p.a. (for 6% p.a. assume YP = 9.712, for 8% p.a. assume YP = 8.559 for 15 years) (08 Marks)

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