

CBCS SCHEME

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18CV71

Seventh Semester B.E. Degree Examination, June/July 2024 Quantity Surveying and Contract 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 detail estimate for a residential building shown in Fig.Q.1 for the following items of work:
 - i) Centre line calculations. (05 Marks)
 - ii) Earthwork in excavation for foundation at Rs.150/m³. (05 Marks)
 - iii) Size stone masonry in C.M 1:6 for foundation and basement at Rs.3250/m³. (10 Marks)

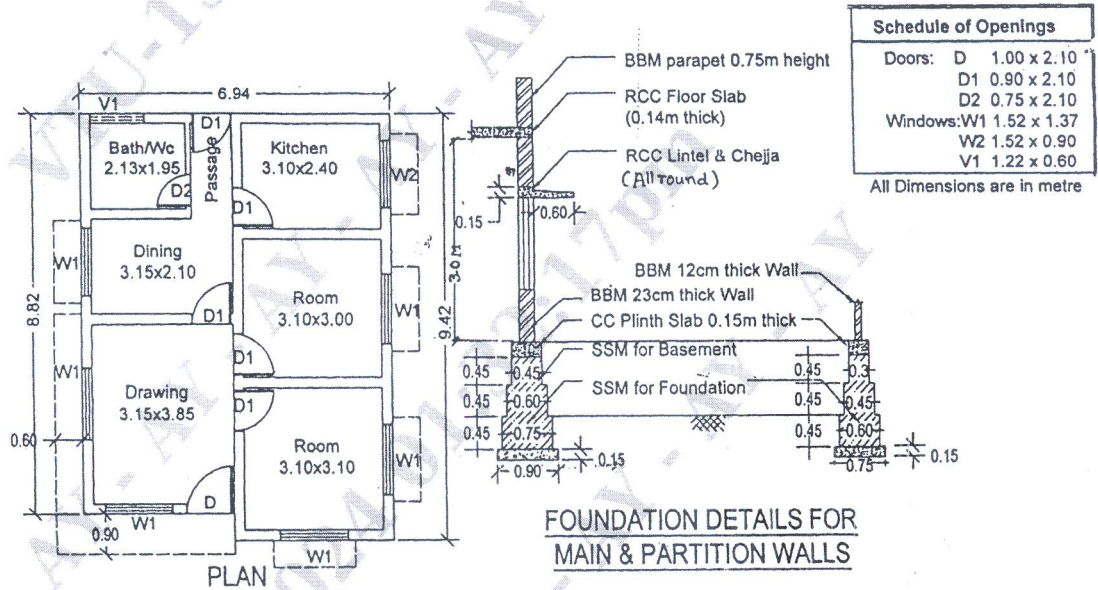


Fig.Q.1

OR

- 2 Estimate the cost of RCC roof slab in C.C 1:1 $\frac{1}{2}$:3 over a room of internal dimension 3.2m x 4.2m. Calculate the quantity of concrete and steel reinforcement. Given: Slab thickness = 150mm, Two-way slab steel reinforcement : Main steel = 10mm ϕ @ 150 MMC/C, secondary steel : 8mm ϕ @ 200 MMC/C. Alternate bars cranked at one end only. Cost of concrete = Rs.12000/m³. Cost of steel bars = Rs.50/kg. (20 Marks)

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.

Module-2

- 3 The details of septic tank is given in Fig.Q.3. Find its quantities of the following items:
- Earthwork excavation for foundation in hard soil.
 - P.C.C. 1:4:8 (Bed concrete)
 - Construction of BBM in CM 1:4 for walls
 - RCC 1:2:4 for cover slab.

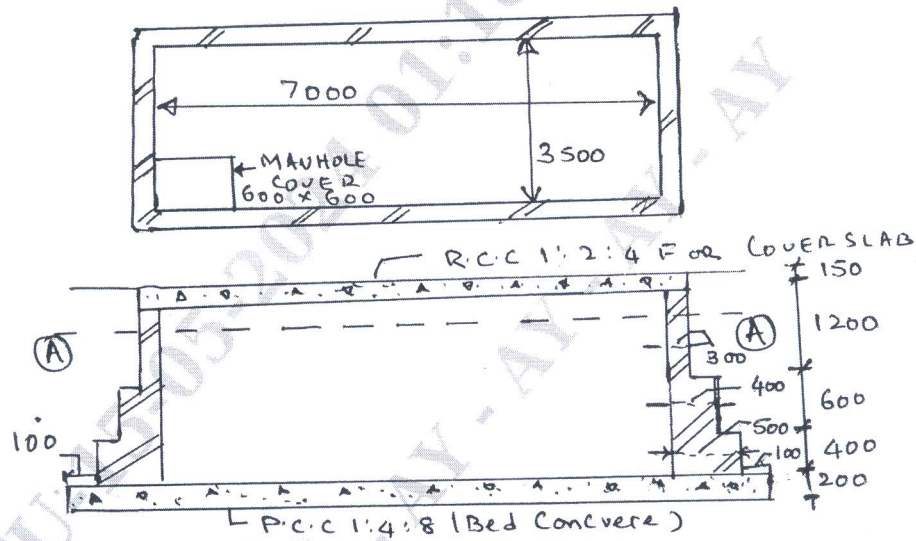


Fig.Q.3: Sketch of septic tank-plan and elevation.

(20 Marks)

OR

- 4 Estimate the quantity of earthwork in cutting for a road of 10m formation width with the following data using mean sectional area method or trapezoidal formula method. Side slopes is 2:1 (H:V) and no cross slope.

Chainage (M) :	0	30	60	90	120	150
Ground level :	80.50	79.30	81.40	84.00	85.10	83.50
Formation level :	75.00	← Rising gradient of 1 in 30 →				

(20 Marks)

Module-3

- 5 a. Mention the objectives of writing specifications. (05 Marks)
- b. Write the detailed specifications for any three of the following:
- First class brickwork in super structure in CM 1:6
 - 12mm thick plastering for inside walls in CM 1:6
 - RCC work for beam in C.C $\left(1:1\frac{1}{2}:3\right)$
 - Distemping two coats with a coat of primer. (15 Marks)

OR

- 6 a. Mention the factors affecting rate of item of work. (05 Marks)
b. Workout from first principles the rate per unit for any three of the following:
i) Earthwork excavation for foundation
ii) First class brickwork in super structure in CM 1:6
iii) RCC roof slab C.C $1:1\frac{1}{2}:3$ with 1% steel
iv) 12MM thick plastering for inside walls in CM 1:6. (15 Marks)

Module-4

- 7 List the types of contract. Briefly explain any three types of contract. (20 Marks)

OR

- 8 Explain the procedure of tendering and award of works in civil engineering projects. (20 Marks)

Module-5

- 9 Write a note on:
i) Tender notice
ii) Contract document
iii) Breach of contract
iv) Earnest money. (20 Marks)

OR

- 10 What is Valuation? Explain briefly methods of valuation buildings. (20 Marks)

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