CBCS SCHEME

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21CV71

Seventh Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Quantity Survey and Contract Management

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Assume any missing data.

Module-1

1 The details of a residential building is shown in Fig. Q1. Estimate the quantities and cost of each item works.
i) Earthwork in excavation for foundation in hard soil @ Rs. 380/m^3.
ii) Plain cement concrete 1:3:6 for bed of the foundation @ Rs. 3000/m^3
iii) Size stone masonary with CM 1:6 for footings and basement @ Rs. 3200/m^3.
iv) First class Brickwork with burnt brick masonary in CM 1:6 in superstructure @ Rs. 4500/m^3.

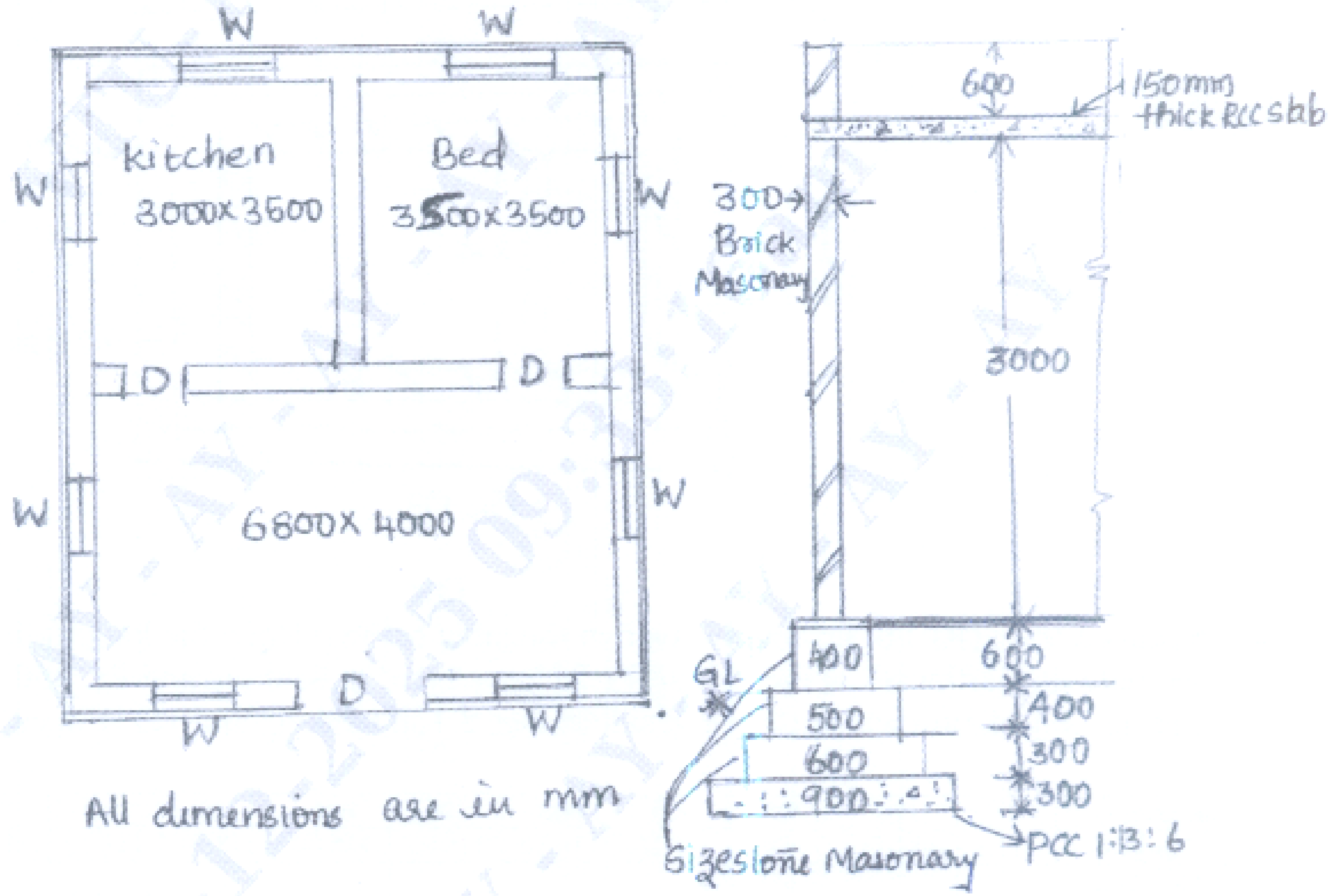

Fig Q1

(20 Marks)

OR

2 a. Explain the purpose of Estimation and discuss the different types of estimates. (12 Marks)
b. Explain the methods of Estimation. (08 Marks)

Module-2

3 The details of septic tank are shown in Fig Q3. Estimate the quantities of following items and cost.

i) Earthwork in excavation @ Rs. 380/m^3.
ii) PCC 1:3:6 for bed @ Rs. 3800/m^3.
iii) BBM in CM 1:4 for all walls @ 4500/m^3
iv) R.C.C 1:1.5:3 for cover of the tank @ Rs. 5500/m^3.

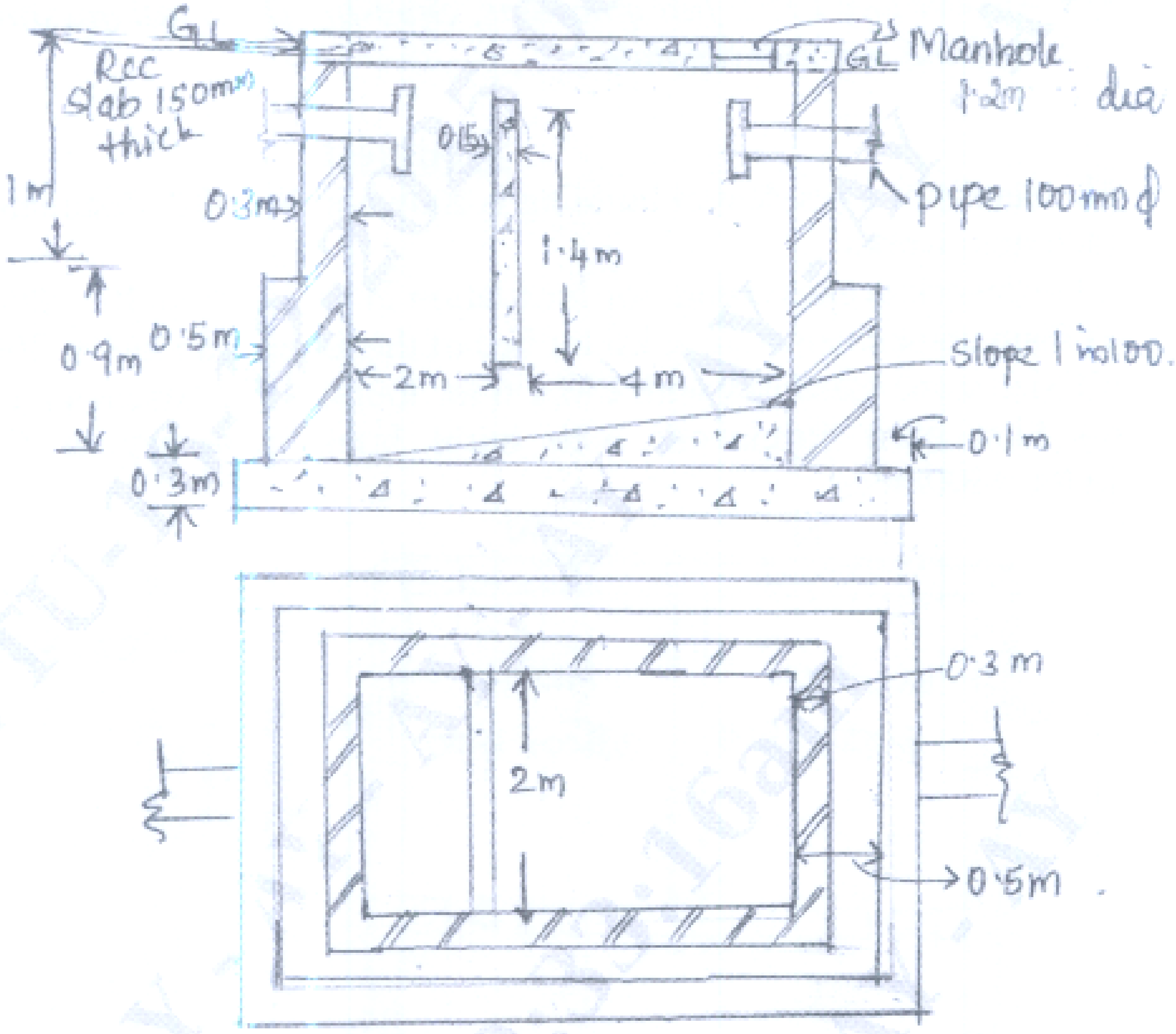

Fig. Q3

(20 Marks)

OR

4 Reduced level (RL) of ground is given in the table below. Draw the longitudinal section and estimate the earthwork at the rate of Rs. 275 per % m^3 in banking and Rs. 350 per % m^3 in cutting. Formation width 10 m and side slopes 2:1 in banking and 1½ :1 in cutting.

Distance (m)	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
RL of Ground	114.5	114.75	115.25	115.20	116.10	116.85	118.00	118.25	118.10	117.80	117.75	117.90	119.50
RL of formation	115	Upward gradient 1 in 200 upto 600 m →					Downward gradient 1 in 400						

(20 Marks)

Module-3

5 a. Explain specifications and type of specifications. (10 Marks)

b. Explain in detail the objectives of writing specifications. (10 Marks)

OR

6 Write the detailed technical specifications for the following.

i) Plain cement concrete in bed of foundation.

ii) Size stone Masonary in CM 1:6

iii) Burnt brick Masonry for superstructure in CM 1:6

iv) R.C.C. 1:1.5:3 for roof slab. (20 Marks)

Module-4

7 a. Explain the importance of rate analysis in construction and its purpose in Civil Engineering. (10 Mark

b. Discuss the factors to be considered in rate analysis. (10 Marks)

OR

8 Carry out the rate analysis for the following :

i) P.C.C. 1:4:8 for foundation

ii) 1st class brick work in superstructure with CM 1:6

iii) RCC 1:1.5:3 for roof slab

iv) 12mm thick plastering with CM 1:4 (20 Marks)

Module-5

9 a. Explain Contract, Discuss in detail the different types of contracts. (10 Marks

b. Explain the procedure of tendering in Civil Engineering project. (10 Marks

OR

10 a. Explain Tender and its classifications. (10 Marks)

b. Write short notes on :

i) Earnest money deposit

ii) Breach of contract

iii) Measurement Book

iv) Normal Muster Roll

v) Bill of quantities. (10 Marks)

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