



# CBCS SCHEME

18CV71

## Seventh Semester B.E. Degree Examination, June/July 2025 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 The plan and sectional details of Residential building is as shown in Figure- Q.1. Work out the quantities of the following items of work.
- Earth work in excavation for foundation in  $m^3$
  - P.C.C. 1:4:8 for foundation bed in  $m^3$
  - S.S.M. in C.M 1:6 for foundation and basement in  $m^3$

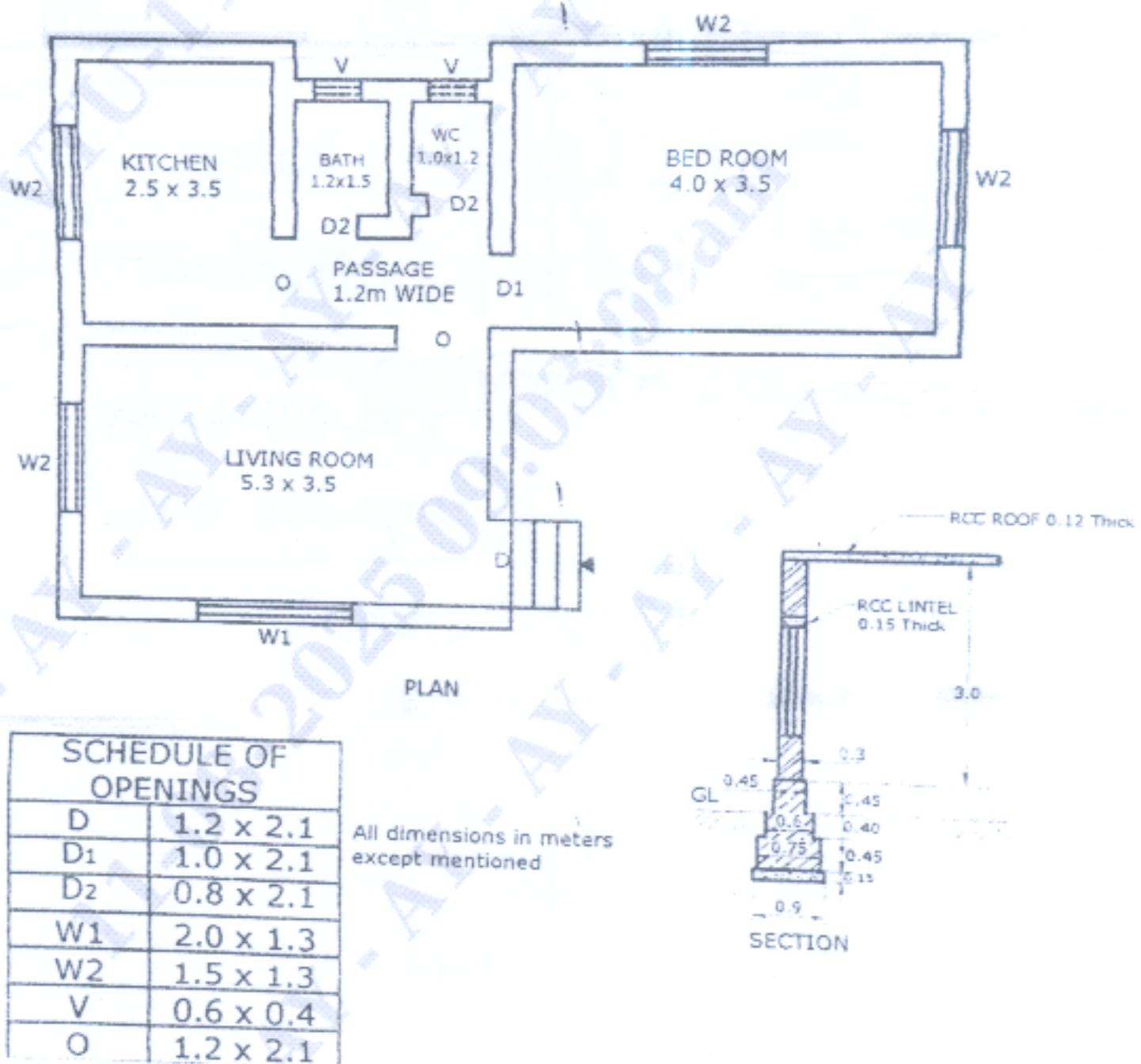


Fig. Q.1

(20 Marks)

OR

- 2 Prepare a detailed estimate of a R.C.C. beam of 4m clear span and 300 mm  $\times$  500 mm in section as shown in figure -Q. 2. Also prepare bar bending schedule.

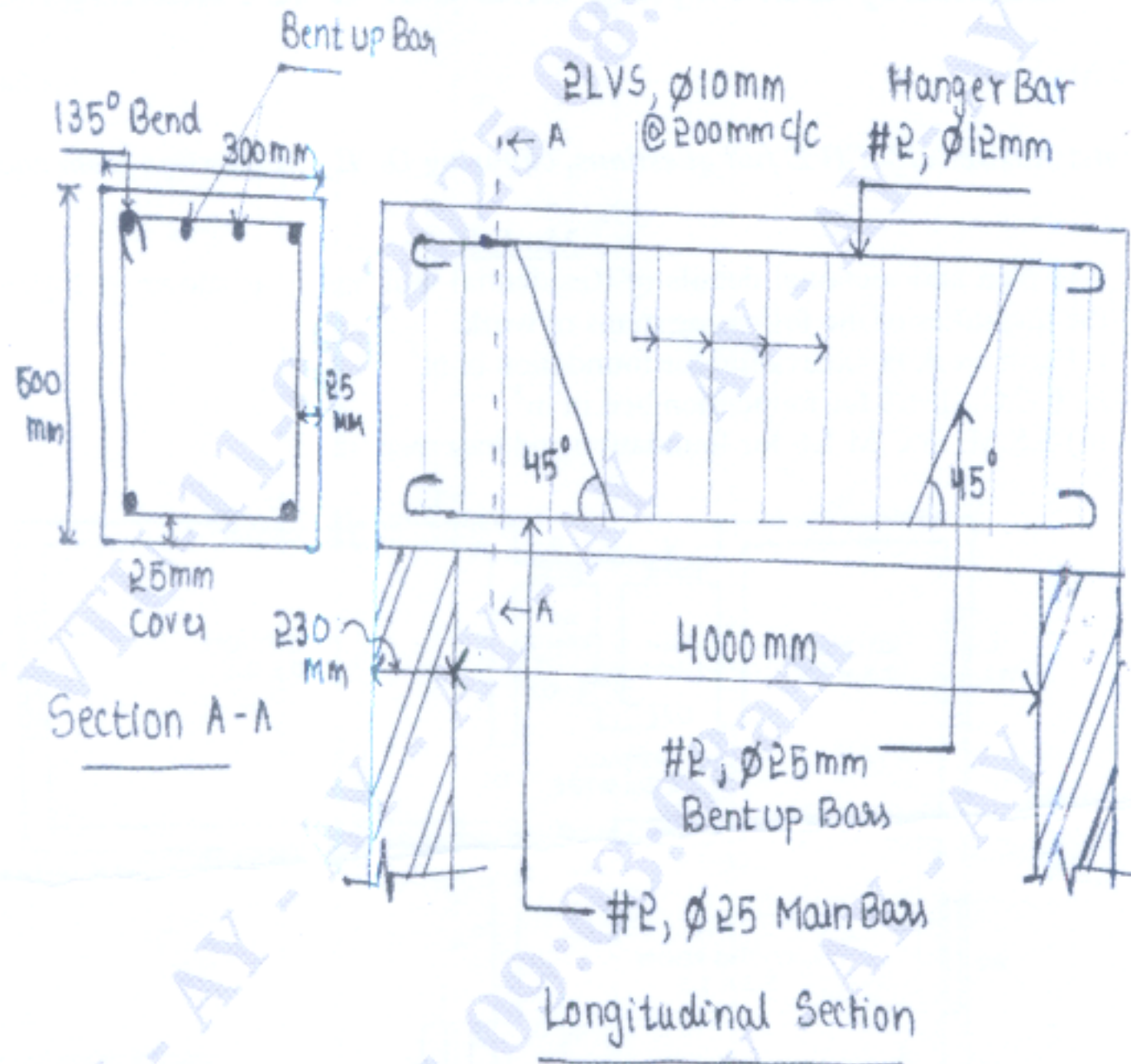


Fig. Q. 2.

(20 Marks)



**Module-2**

- 3 Prepare a detailed estimate of a septic tank along with circular soak pit as shown in figure –Q.3. The details of items of work are as follows:
- Earth work is excavated in hard soil.
  - Foundation and Base with C.C. 1:3:6
  - I class brick Masonry in C.M 1:4
  - R.C.C. 1:2:4 Roof cover slab
  - Plastering with C.M 1:4 with waterproof compound.

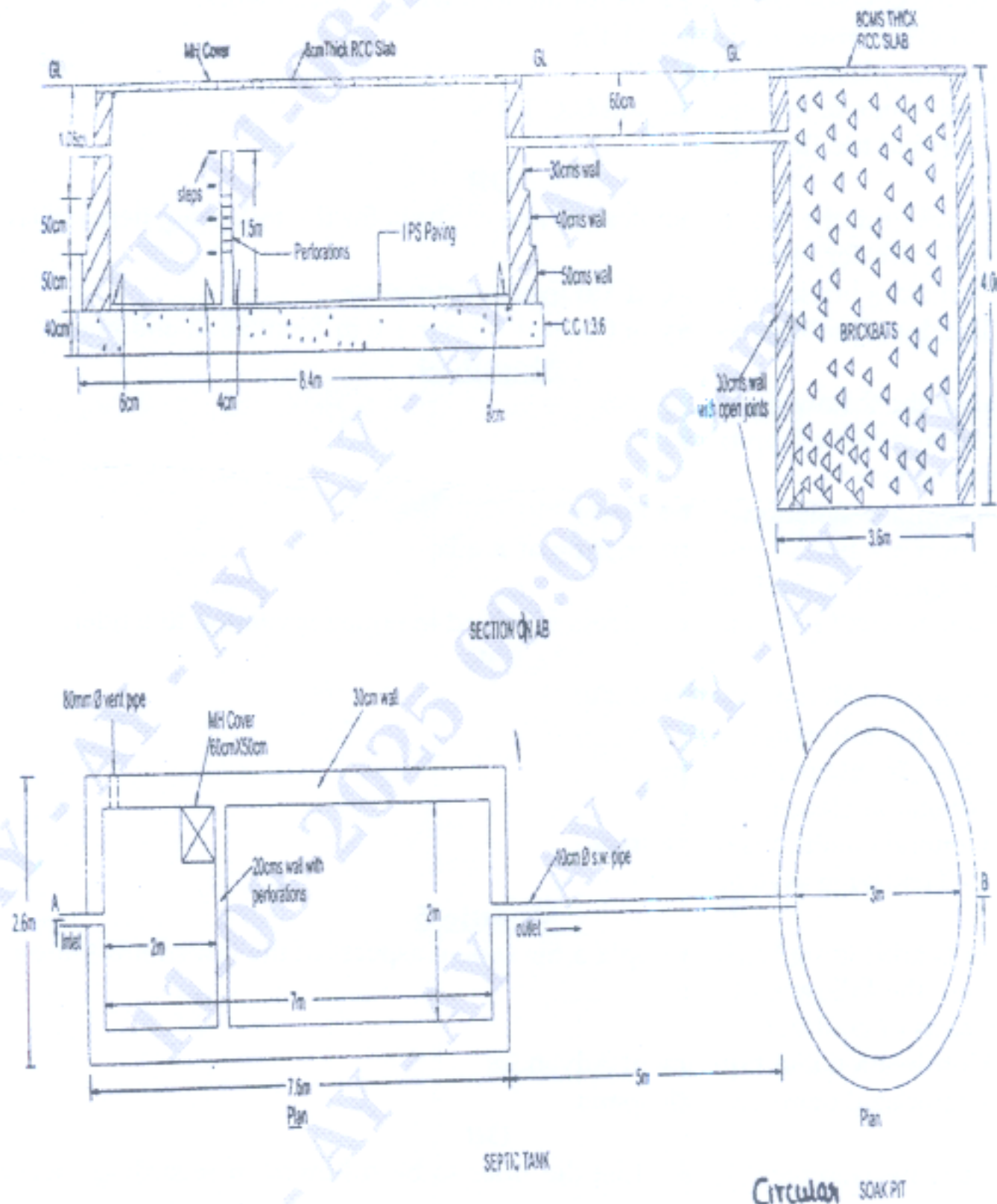


Fig. Q. 3.

(20 Marks)

OR

- 4 Prepare a detailed estimate for earth work for a portion of a road from the following data. Rate of earth work in excavation is Rs. 80 per cum and banking is Rs. 60 per cum. The width of formation is 10 m and side slopes 1.5:1 in cutting and 2:1 in banking. Also draw the longitudinal profile to show the details required. Apply mid section area method.

Dist. In Meters	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
RL of ground	114.5	114.75	115.25	115.2	116.1	118	117.85	118.25	118.1	117.8	117.75	117.9	119.5
RL of formation	115	115	Upward gradient 1 in 200							Downward gradient 1 in 400			

(20 Marks)

**Module-3**

- 5 Write the detailed specifications for the following items of work.

- First class Brick work in C.M 1:6
- Cement plastering in CM 1:6
- Bed concrete in foundation in C.C 1:4:8
- Vitrified tile flooring.

(20 Marks)

OR

- 6 Workout from the first principles the rate analysis for the following items of work.

- PCC 1:3:6 for plinth
- First class brick work in CM 1:6 in super structure
- Random Rubble masonry in Cement Mortar 1:6 in foundation and plinth.

(20 Marks)

**Module-4**

- 7 a. Explain the following:

- Administrative Approval
- Expenditure sanction
- Technical sanction
- Appropriation or re-appropriation of funds
- Pre-Qualification Process

(10 Marks)

- b. What is tender? Explain the process involved in notice invitation to tender.

(10 Marks)

OR

- 8 a. Explain the different types of contract.

(10 Marks)

- b. Explain the following :

- Public private partnerships
- Escalation clauses
- General conditions of contract
- E- Tendering system.

(10 Marks)

**Module-5**

- 9 a. What is arbitration? Briefly explain the salient aspects of the law of arbitration.

(10 Marks)

- b. Explain the following terms:

- Breach of contract
- Mobilization and Equipment Advances
- Liquidated damages and Bonus

(10 Marks)

OR

- 10 a. What is measurement book? List the rules to be followed in recording measurement book.

(10 Marks)

- b. Differentiate between the following :

- Depreciation and obsolescence
- Scrap value and salvage value.

(10 Marks)