

# CBCS SCHEME



15CV81

## Eighth Semester B.E. Degree Examination, July/August 2021 Quantity Surveying and Contracts Management

Time: 3 hrs.

Max. Marks: 80

*Note: Answer any FIVE full questions.*

- 1 The details of a residential building is shown in Fig.Q1. Estimate the quantities and the cost of the following items of works.
- Earth work excavation for foundation in or ordinary soil @ Rs. 250/- per cum.
  - UCRM in foundation in CM 1:6 @ Rs. 1200/- per cum
  - BBM in Superstructure in CM 1:6 @ Rs. 5500/- per cum.
  - Plastering to masonry inside in CM 1:6 12mm thick @ Rs 150/- per sqm.
- (16 Marks)

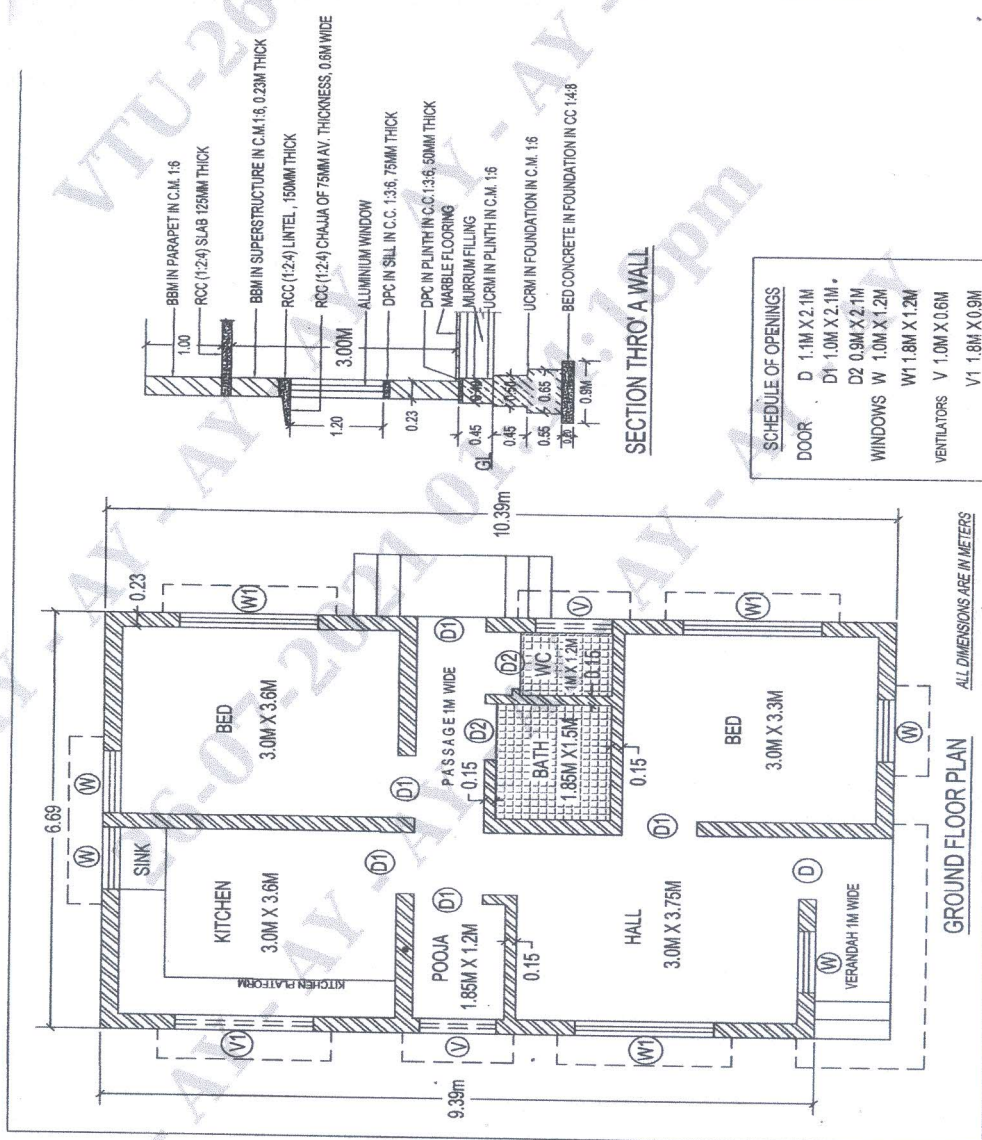
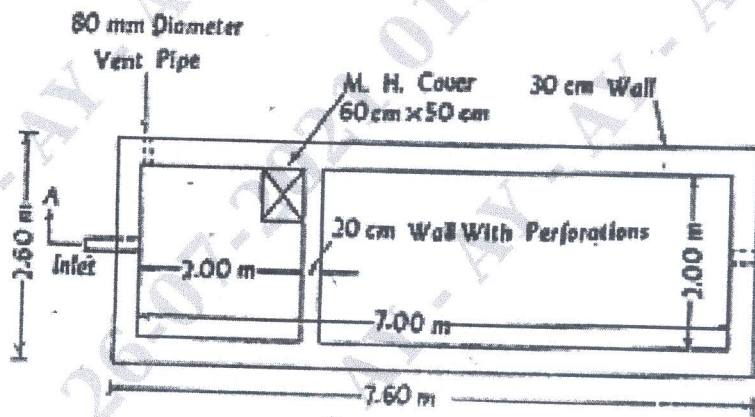
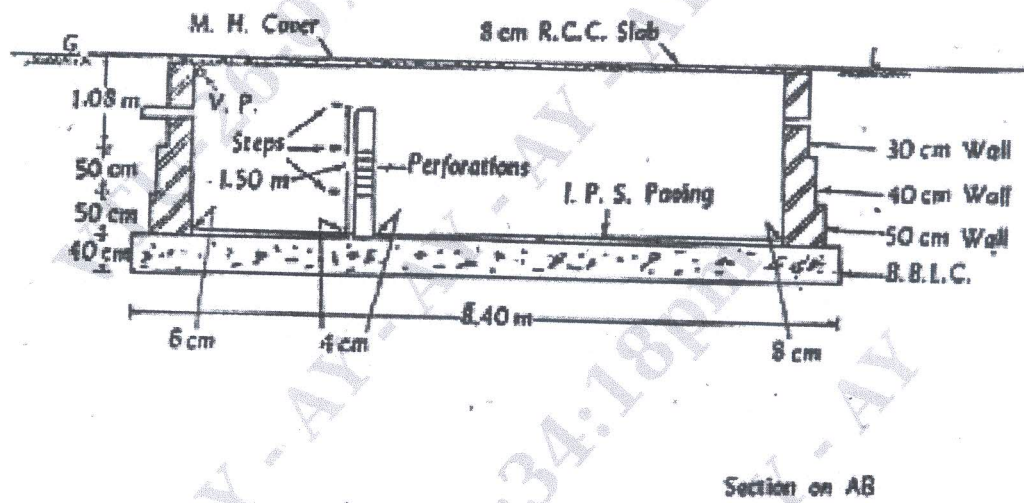


Fig.Q1

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.

- 2 a. What do you mean by estimate? Why estimation is necessary? Discuss the documents involved for preparing an estimate. (08 Marks)
- b. What are the types of estimate? Discuss any one of them. (08 Marks)
- 3 The details of septic tank are shown in Fig.Q3. Estimate the quantities of the following items of work and cost of abstract. (16 Marks)
- Earthwork excavation for foundation @ Rs. 200/- per cum
  - BBM in CM 1:4 for side walls @ Rs.5000/- per cum
  - RCC <1:1.5:8> slab without steel @ Rs.5290/- per cum.
  - Plastering to walls inside and floor @ Rs. 150/- per sqm.



Plan Septic Tank  
Fig.Q3

- 4 Prepare a detailed estimate for earthwork for a portion of road from the following data:

Distance in metres	RL of the Ground in m	RL of formation
0	114.50	115.00
100	114.75	↑
200	115.25	Upward gradient of 1 in 200
300	115.20	
400	116.10	
500	116.85	
600	118.00	↓
700	118.25	↑
800	118.10	Downward gradient of 1 in 400
900	117.80	
1000	117.75	
1100	117.90	
1200	117.50	↓

Formation width is 10m, side slope in banking is 2:1 and side slope in cutting is 1.5 : 1. Formation level @ 0 chainage is 115.00. Cost of earthwork in banking @ Rs.300/- per cum cost of earth work in cutting is @ Rs. 400/- per cum. Draw longitudinal profile of the road.

(16 Marks)

- 5 Write down the detailed specifications of the following :
- Earthwork in excavation for foundation
  - Bed concrete in foundation in CC 1:4:8
  - Plastering work in CM 1:6, 12 mm thick
  - C.C. 1:3:6, flooring, 25mm thick.
- (16 Marks)
- 6 Work out from the first principles the rate per unit of the following items of works.
- PCC 1:4:8 for foundation
  - Plastering in CM 1:6, 12 mm thick
  - RCC (1:1.5:3) for roof slab, 120mm thick without steel
  - BBM in CM 1:6, for Superstructure
- (16 Marks)
- 7
- What are the features of the tender documents? (10 Marks)
  - What do you mean by breach of contract? (06 Marks)
- 8
- What do you mean by contract? (06 Marks)
  - What are the types of contract? Explain any one of them briefly. (10 Marks)
- 9 Write short notes on :
- EMD and SD
  - Market value, scrap value and salvage value
  - Sinking fund
  - Liquidated damages.
- (16 Marks)
- 10
- What do you mean by Valuation? (08 Marks)
  - What is the purpose of Valuation? (08 Marks)

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