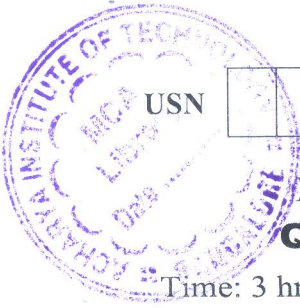


# CBCS SCHEME



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## Eighth Semester B.E. Degree Examination, June/July 2023 Quantity Surveying and Contracts Management

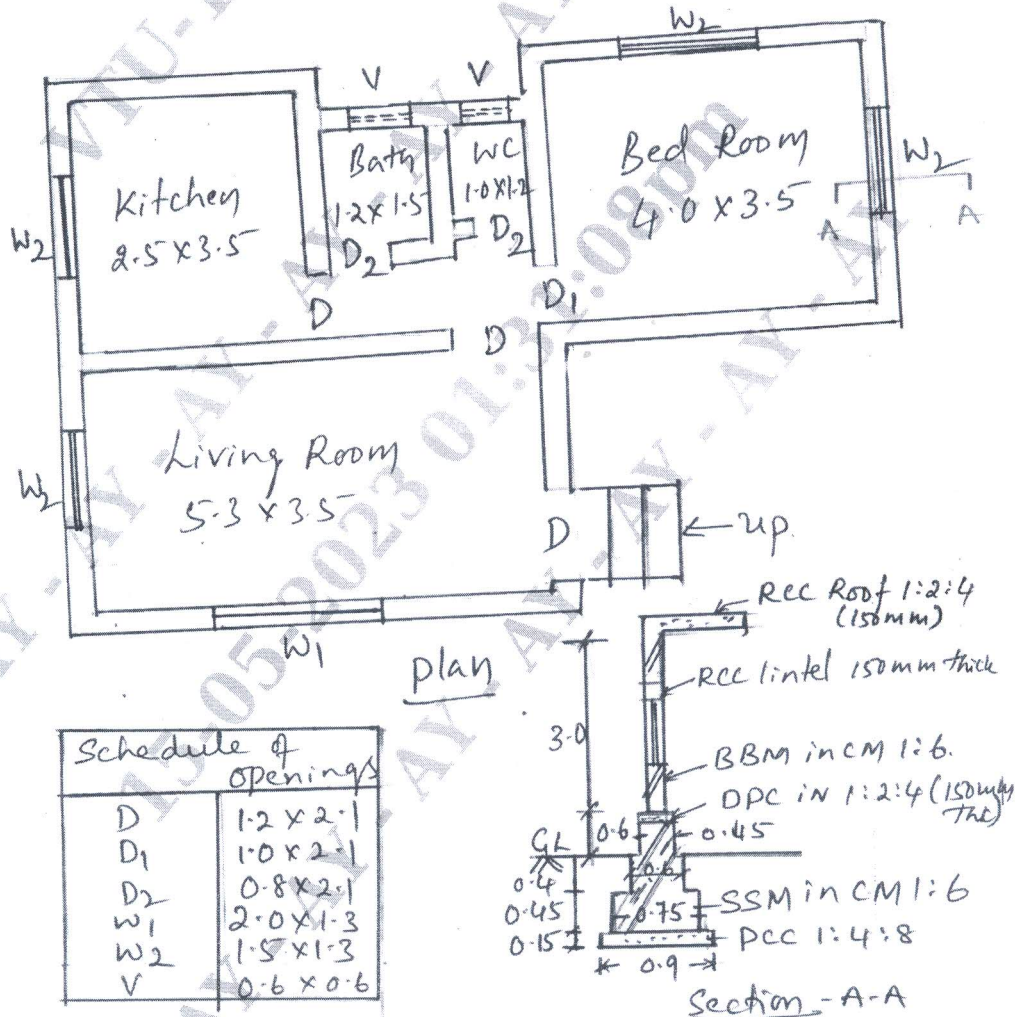
Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 1 Prepare a detailed estimate for a residential building shown in Fig. Q1 for the following items of work.
- (i) Earth work Excavation @ Rs.100/- m<sup>3</sup>.
  - (ii) PCC 1 : 4 : 8 for wall foundation at Rs.2500/m<sup>3</sup>
  - (iii) Size stone masonry in CM 1 : 8 for footing and basement foundation at Rs.1800/-m<sup>3</sup>.
  - (iv) First class Burnt Brick masonry for super structure in CM 1 : 6 at Rs.2000/-m<sup>3</sup>.
- (20 Marks)



Note: All dimensions are in meters.

Fig. Q1  
1 of 3

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.

OR

- 2 a. What are the different types of Estimate? Explain any two types of Estimate. (10 Marks)  
 b. Workout the quantity of M20 grade of concrete and reinforcement in a Two way slab for the following details:  
 Size of room - 5m x 4m  
 Thickness of slab - 150 mm  
 Reinforcement - 12 mm @ 125 mm C/C on both the direction.  
 Alternate bars are cracked clear cover top and bottom - 25 mm  
 Development length = 45 times diameter of bar. (10 Marks)

**Module-2**

- 3 Estimate the quantities and cost of earth work for a portion of the road from the following data:  
 The cost of filling is Rs.180/m<sup>3</sup> and cutting Rs.120/m<sup>3</sup>. The width of formation is 10 m and side slopes 1 1/2 : 1 in cutting and 2 : 1 in banking and also draw the longitudinal profile of the road.

Distance in diameter	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 level	115	115	Upward gradient 1 in 200						Downward gradient 1 in 400					

(20 Marks)

OR

- 4 The details of septic tank are shown in Fig. Q4. Estimate the quantities for the following items of work and cost of abstract:  
 (i) Earth work in Excavation for foundation in hard soil at Rs.300/m<sup>3</sup>.  
 (ii) PCC 1 : 4 : 8 for bed concrete at Rs.2500/-m<sup>3</sup>.  
 (iii) BBM in CM 1 : 4 for side wall at Rs.2200 /-m<sup>3</sup>.  
 (iv) RCC 1:1 1/2 : 3 for cover slab at Rs.3000/- m<sup>3</sup>. (20 Marks)

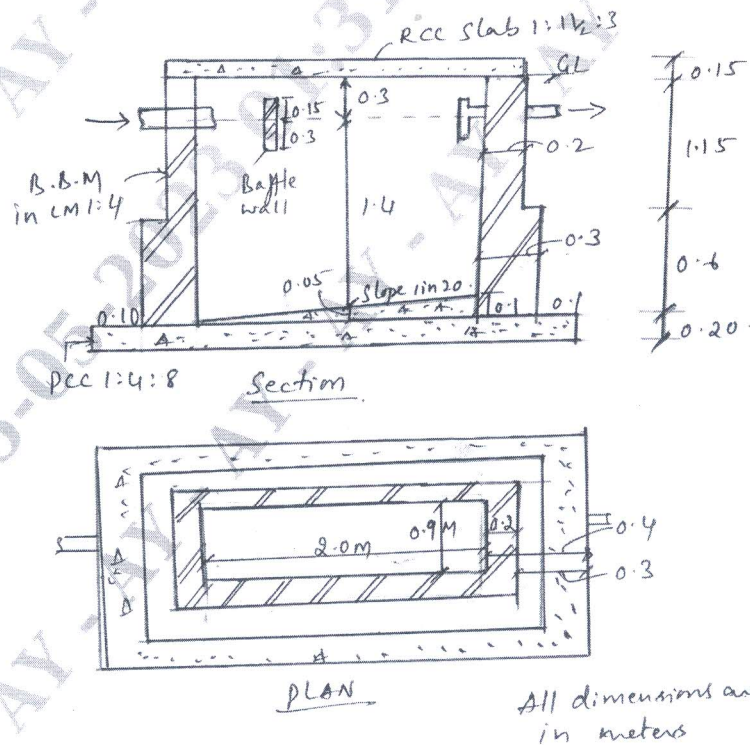


Fig. Q4



**Module-3**

5 Prepare detail technical specification for the following items:

- (i) Earthwork Excavation for foundation.
- (ii) Burnt Brick Masonry in CM 1 : 6.
- (iii) RCC work proportion  $\left(1:1\frac{1}{2}:3\right)$ .
- (iv) Marble flooring.
- (v) Plastering in CM 1 : 6 for interior surface.

(20 Marks)

**OR**

6 Carry out the rate analysis for the following :

- (i) Earth work excavation for foundation in ordinary soil.
- (ii) PCC 1 : 4 : 8 for foundation using 40 mm and down size aggregates.
- (iii) RCC  $1:1\frac{1}{2}:3$  for floor slab.
- (iv) First class brick work in CM 1 : 6 in super structure.
- (v) Cement plaster for inside in CM 1 : 4.

(20 Marks)

**Module-4**

7 a. Explain the procedure of tendering and award of works in Civil Engineering Project.

(10 Marks)

b. Explain : (i) E-Tendering (ii) Contract document (iii) Letter of intent.

(10 Marks)

**OR**

8 a. Lists different types of contracts? Explain any two types of contract?

(10 Marks)

b. Explain the following :

- (i) Administrative approval
- (ii) EPC
- (iii) Technical Sanction.

(10 Marks)

**Module-5**

9 Write short notes for the following :

- (i) Performance security.
- (ii) Contract management.
- (iii) Breach of contract.
- (iv) Mobilization and equipment advances.
- (v) Measurement and Payments.

(20 Marks)

**OR**

10 a. Explain the methods of valuation.

(05 Marks)

b. Write short notes for the following :

- (i) Obsolescence.
- (ii) Scrap value.
- (iii) Market value.
- (iv) Book value.
- (v) Salvage value.

(15 Marks)

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