

CBCS SCHEME

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15CV81

**Eighth Semester B.E. Degree Examination, June/July 2019**  
**Quantity Surveying and Contracts Management**

Time: 3 hrs.

Max. Marks: 80

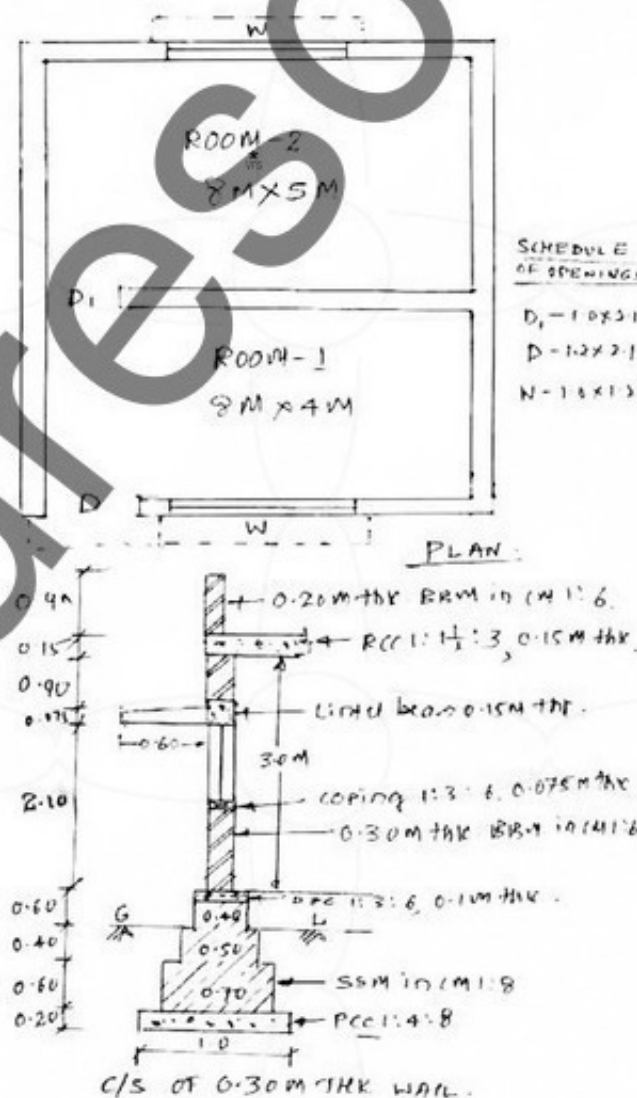
*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

**Module-1**

- 1 The details of the two room building are shown in the Fig.Q.1. Estimate the quantities and cost of the following items of works:
- Earth work excavation for foundation in ordinary soil at Rs.300/m<sup>3</sup>.
  - Cement concrete bed 1:4:8 for wall foundations at Rs.2500/m<sup>3</sup>.
  - SSM (Size Stone Masonry) in CM 1:8 for footings and basement foundation at Rs.1800/m<sup>3</sup>.
  - First class BBM (Burst Brick Masonry) work for super structure in CM 1:6 at Rs.2000/m<sup>3</sup>.
  - RCC 1:1½:3 root slab at Rs.3000/m<sup>3</sup>.
- (16 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.

Fig.Q.1



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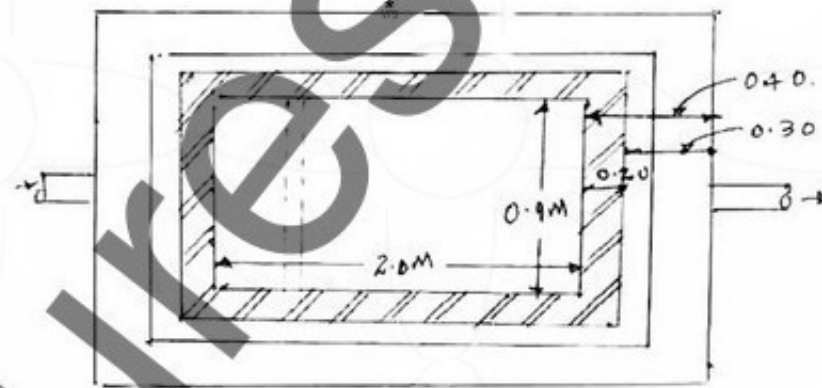
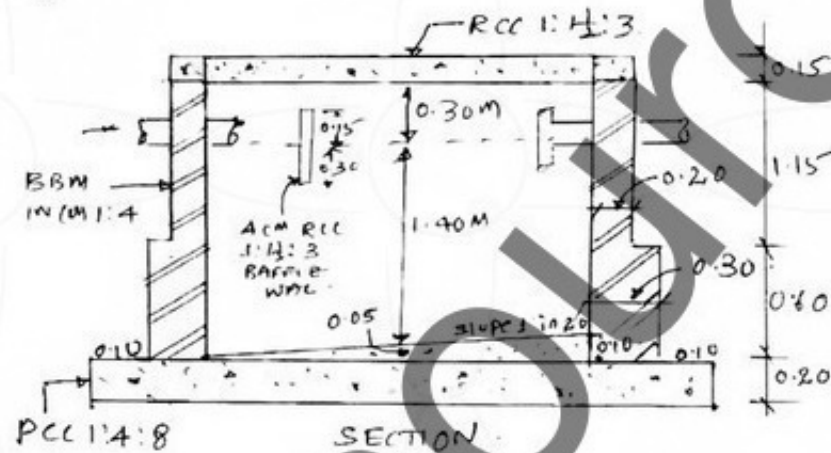
OR

- 2 What are the different types of estimates? Explain any three different types of estimation. (16 Marks)

**Module-2**

- 3 The details of septic tank are shown in the Fig.Q.3. Estimate the quantities for the following items of work and cost of abstract:

- i) Earthwork in excavation for foundation hard soil at Rs.400/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 walls at Rs.2200/m<sup>3</sup>
  - iv) RCC 1:1½:3 for cover slab at Rs.3000/m<sup>3</sup>
- (16 Marks)



PLAN  
Fig.Q.3

OR

- 4 Estimate the quantities and cost of earth work for a portion of the road from the following data. Formation width of the road is 10m side slopes are 2:1 in filling and 1.5:1 in cutting. The cost of filling is Rs.180/m<sup>3</sup> and cutting Rs.120/m<sup>3</sup>.

Ch (m)	0	40	80	120	160	200	240	280
RL of GL (m)	100.60	100.20	99.80	100.20	100.80	101.90	102.40	102.50
RL of FL (m)	101.00	← Raising Gradient 1 in 400 →						

(16 Marks)

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**Module-3**

- 5 Write the detailed technical specifications for the following:
- Earth work excavation for foundation
  - Burnt Brick Masonry in CM 1:6
  - Plastering in CM 1:6 to interior surface
  - RCC work proportion 1:2:4.

(16 Marks)

**OR**

- 6 Carryout the rate analysis for the following:
- Earth work excavation for foundation in ordinary soil.
  - P.C.C. 1:4:8 for foundation using 40mm and down size aggregate.
  - Coursed rubble masonry in CM 1:6.
  - RCC  $1:1\frac{1}{2}:3$  for roof slab.

(16 Marks)

**Module-4**

- 7 Explain the procedure of tendering and award of works in civil engineering projects.

(16 Marks)

**OR**

- 8 What are the different types of contracts? Explain any three types of contracts.

(16 Marks)

**Module-5**

- 9 Write short notes about any four of the following:
- Performance security
  - Liquidated damages
  - Contract management
  - Breach of contract
  - Mobilization and equipment advances.

(16 Marks)

**OR**

- 10 a. What is the difference between the cost, estimate and value?  
b. Explain the methods of valuation.

(06 Marks)

(10 Marks)

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**Eighth Semester B.E. Degree Examination, November 2020**  
**Quantity Surveying and Contract Management**

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions irrespective of modules.

**Module-1**

- 1 The details of a residential building is shown in Fig.Q1. Estimate the quantities and cost of each item of works.
- (i) Earthwork in excavation for Foundation in hard soil @ Rs. 380/m<sup>3</sup>.
  - (ii) Plain cement concrete 1 : 3 : 6 for bed of the foundation @ Rs. 3000/m<sup>3</sup>.
  - (iii) Size stone masonry with CM 1 : 6 for footings and basement @ Rs. 2200 / m<sup>3</sup>
  - (iv) First class Brickwork with burnt brick masonry CM 1:6 in super structure @ Rs. 4500/-

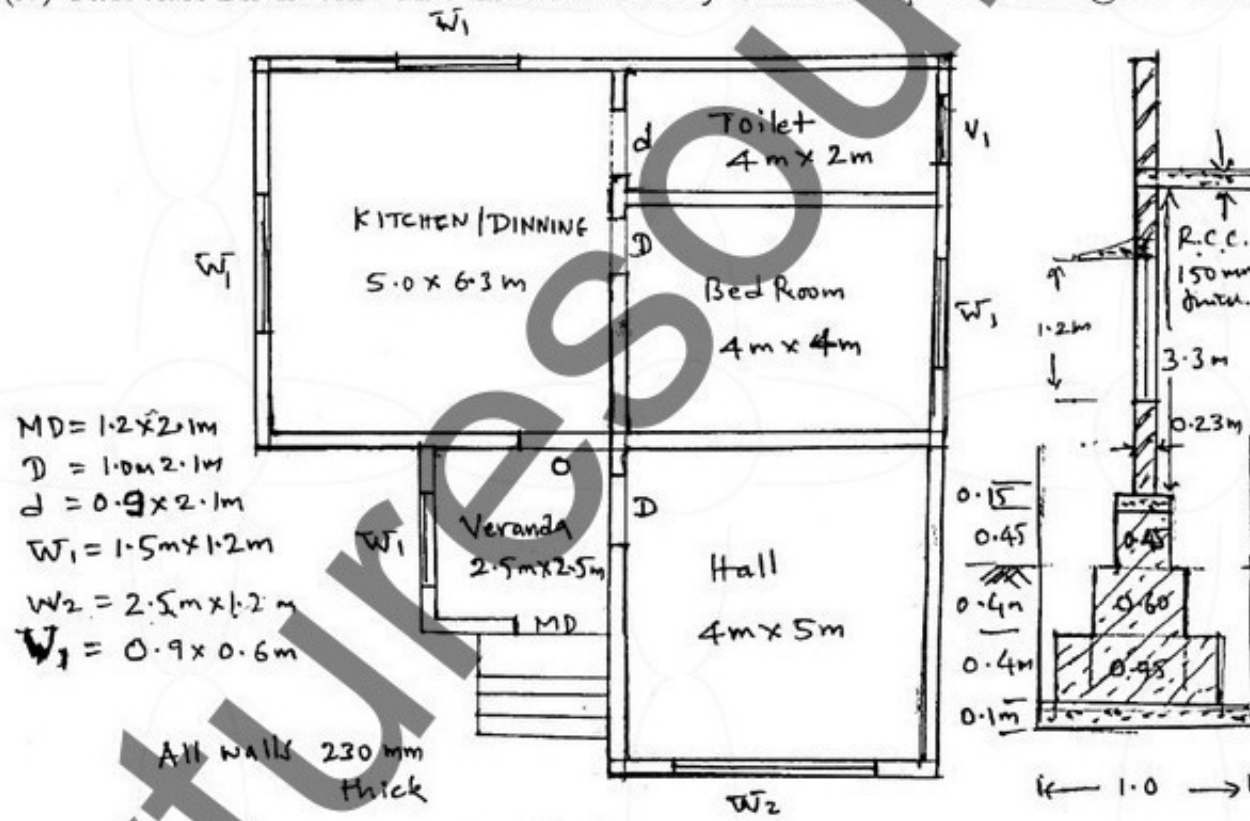


Fig.Q1 (16 Marks)

- 2 Explain the purpose of estimation. List any two types of estimates and explain. (16 Marks)

**Module-2**

- 3 The details of septic tank are shown in Fig.Q2. Estimate the quantities of follows item and cost.
- (i) Earth work in excavation @ Rs. 380/m<sup>3</sup>
  - (ii) P.C.C. 1:3:6 for bed @ Rs. 3000/m<sup>3</sup>
  - (iii) BBM in CM 1:4 for all walls @ 4500/m<sup>3</sup>
  - (iv) R.C.C. 1 : 1.5 : 3 for cover of the tank @ Rs. 5500/m<sup>3</sup>.

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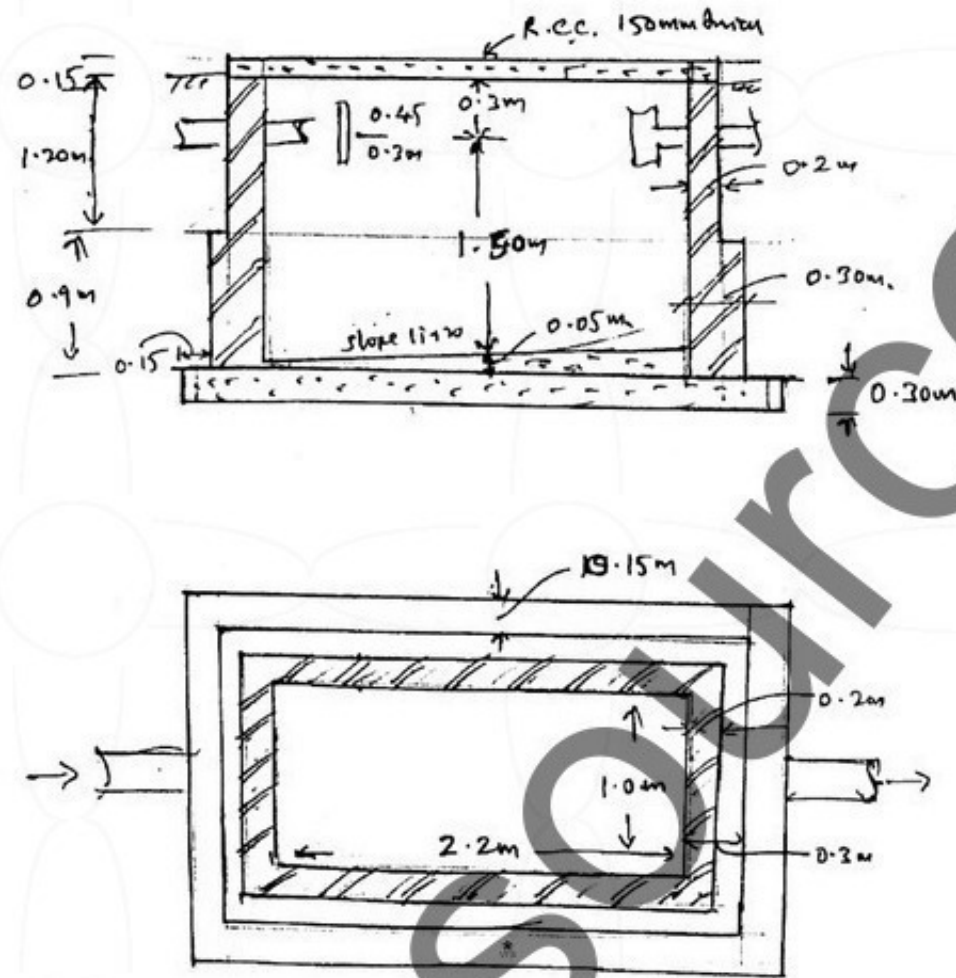


Fig.Q2

(16 Marks)

- 4 Reduced levels of ground along a proposed road is given in the table the formation level at 1<sup>st</sup> chain is 108 and the road is in downward gradient of 1:150 up to the chainage four and then gradient changes to 1 : 100 downward formation width of road is 10m side slopes 2:1(H:V) Length of chain 30m. Estimate the quantities of earthwork.

Chainage	0	1	2	3	4	5	6	7	8	9	10
RL of ground	106	106.6	106.44	106.9	106.42	105.3	106	105.1	105.62	105	104.3

(16 Marks)

**Module-3**

- 5 Write detailed specifications for following :
- (i) Plain cement concrete in bed of foundation
  - (ii) Size stone masonry in CM 1:6
  - (iii) Reinforced cement concrete M<sub>20</sub> grade (1 : 1½ : 3)
  - (iv) Painting plastered surface including preparation of surface.
- (16 Marks)
- 6 Carry out the Rate Analysis for
- (i) Plain cement concrete 1 : 3 : 6
  - (ii) Burnt Brick Masonry in CM 1 : 6.
  - (iii) Plastering with cement mortar CM 1 : 4
  - (iv) Painting the cement plastered walls with 2 coats putty and 2 coats paint.
- (16 Marks)

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**Module-4**

7 What is Tender? Explain the departmental procedure of tendering civil works. (16 Marks)

8 Explain (i) Prequalification  
(ii) Bid submission and Evaluation process  
(iii) Law of contract  
(iv) Contract forms. (16 Marks)

**Module-5**

9 Explain (i) Mobilization and equipment advance  
(ii) Secured advance  
(iii) Liquidated damages and bonus  
(iv) Dispute resolution mechanism. (16 Marks)

10 What is valuation? Explain the methods of valuation of buildings. (16 Marks)

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