



CBCS SCHEME

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18CV71

Seventh Semester B.E. Degree Examination, Jan./Feb. 2023 Quantity Surveying and Contract Management

Time: 3 hrs.

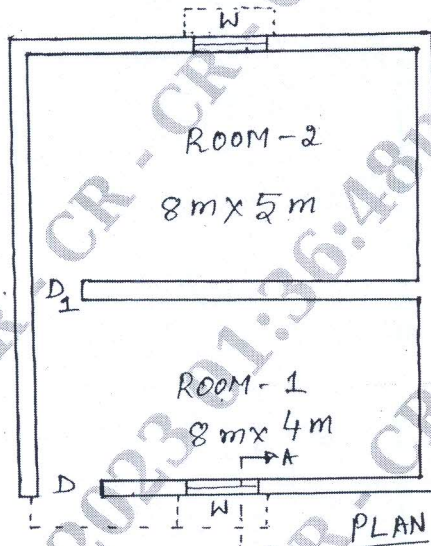
Max. Marks: 100

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

Module-1

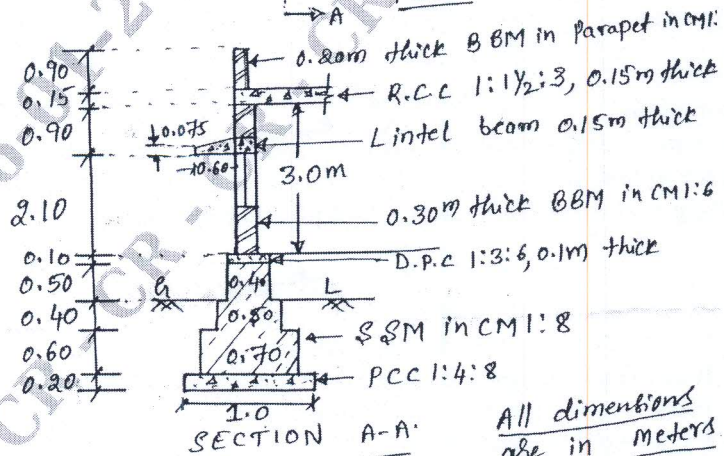
- 1 The details of the two room building are shown in the Fig.Q1. Estimate the quantities and cost of the following items of works:

- Earth work excavation for foundation in ordinary soil at Rs. 390/m³.
- Cement concrete bed 1:4:8 for wall foundations at Rs.3600/m³.
- SSM (Size Stone Masonry) in CM 1:8 for foundation and basement at Rs. 2600/m³.
- First class BBM (Burnt Brick Masonry) work for super structure in CM1:6 at Rs. 5400/m³.
- RCC 1 : 1½ : 3 roof slab at Rs. 4800/m³.



SCHEDULE OF OPENINGS

- D - 1.2 x 2.1
D₁ - 1.0 x 2.1
W - 1.0 x 1.2



All dimensions are in meters.

Fig.Q1

(20 Marks)

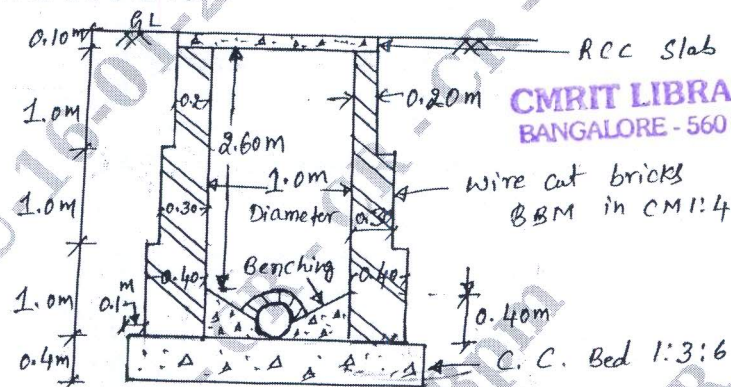
Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

OR

- 2 What is an estimate? Explain briefly purpose and different types of estimate (any three). (20 Marks)

Module-2

- 3 The details of manhole is given in Fig.Q3. Estimate the quantities of the following items:
 i) Earthwork excavation for foundation in hard soil
 ii) B.B.M in CM 1 : 4 for walls
 iii) RCC roof slab in C.C 1 : 2 : 4
 iv) Plastering in CM 1 : 3 for inside walls
 v) Bed concrete in CC 1 : 3 : 6.



Manhole Cross Section Details
Fig.Q3

(20 Marks)

OR

- 4 Estimate the quantities and cost of earth work for a portion of the road from the following data:

Distance in 'm'	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
R.L. of ground	114.50	114.75	115.25	115.20	116.10	116.85	118.00	118.25	118.10	117.80	117.75	117.90	117.50
R.L. of formation	115	← Upward gradient 1 in 200 →						← Downward gradient 1 in 200 →					

Formation width of road is 10m. Side slope 2 : 1 in banking and 1.5:1 in cutting. Use Mid sectional area method. Cost of earthwork in banking at Rs.300/m³ and cost of earthwork in cutting is at Rs.400/m³. Draw longitudinal profile of the road. (20 Marks)

Module-3

- 5 Write detailed specification for following :
 i) Earthwork excavation for foundation
 ii) Burnt brick masonry for super structure in CM 1 : 6.
 iii) Plastering work in CM 1:6, 12mm thick
 iv) R.C.C work proportion 1 : 2 : 4.

(20 Marks)

OR

- 6 Workout from the first principles the rate per unit of the following items of works.
i) PCC 1 : 4 : 8 for foundation
ii) BBM in CM 1:6 for super structure
iii) RCC roof slab 1 : 1½ : 3 with 1% steel
iv) 12mm thick plastering for inside walls in CM 1 : 6. (20 Marks)

Module-4

- 7 List the types of contract. Briefly explain any three types of contract. (20 Marks)

OR

- 8 Write short notes on :
a. Tender and its process
b. Administrative approval
c. Prequalification
d. Elements of Standard tender document. (20 Marks)

Module-5

- 9 Write short notes on :
a. EMD and SD
b. Sinking fund
c. Suspension of work
d. Mobilization and Equipment advance (20 Marks)

OR

- 10 What is valuation? Explain briefly purpose and methods of valuation of buildings. (20 Marks)
