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18CV71

Seventh Semester B.E. Degree Examination, Feb./Mar. 2022
Quantity Surveying and Contracts Management

Time: 3 hrs. Max. Marks: 100

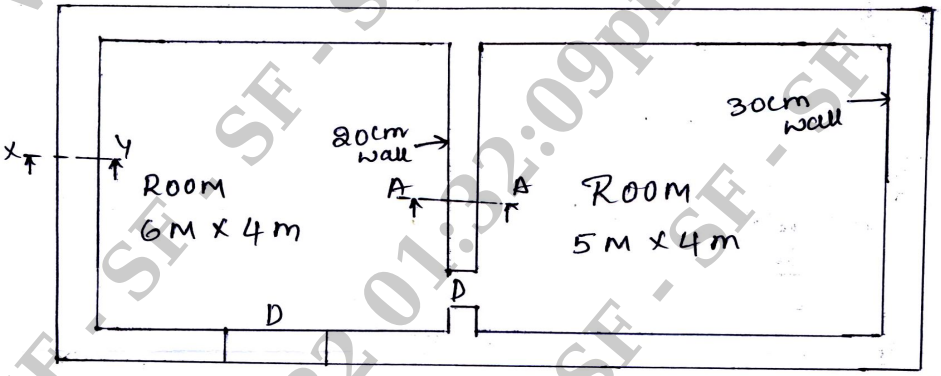
Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 What is an estimate? Explain briefly purpose and different types of estimates (any three). **(20 Marks)**

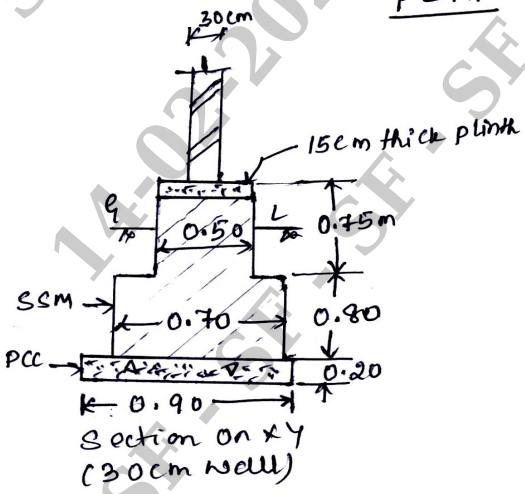
OR

2 The details of two room building are shown in the Fig.Q2. Estimate quantities and cost of the following items of work:
(i) Earthwork excavation foundation at Rs.380/m^3
(ii) Bed concrete 1 : 4 : 8 for foundation at Rs.2600/m^3
(iii) S.S.M. for foundation and basement at Rs.3600/m^3



PLAN

ALL DIMENSIONS ARE in metre. Unless otherwise mentioned.



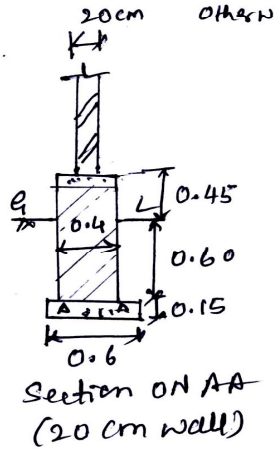


Fig.Q2 **(20 Marks)**

Module-2

3 The details of septic tank are shown in Fig.Q3. Estimate the quantities of following items and cost. **(20 Marks)**

(i) Earthwork excavation at Rs. 400/m^3
(ii) PCC 1 : 3 : 6 for bed at Rs. 2500/m^3
(iii) BBM in CM 1 : 4 at Rs. 2200/m^3
(iv) R.C.C. 1 : 2 : 4 roof slab cover at Rs. 3000/m^3
(v) 12mm cement plaster for sidewalls at Rs. 200/m^2

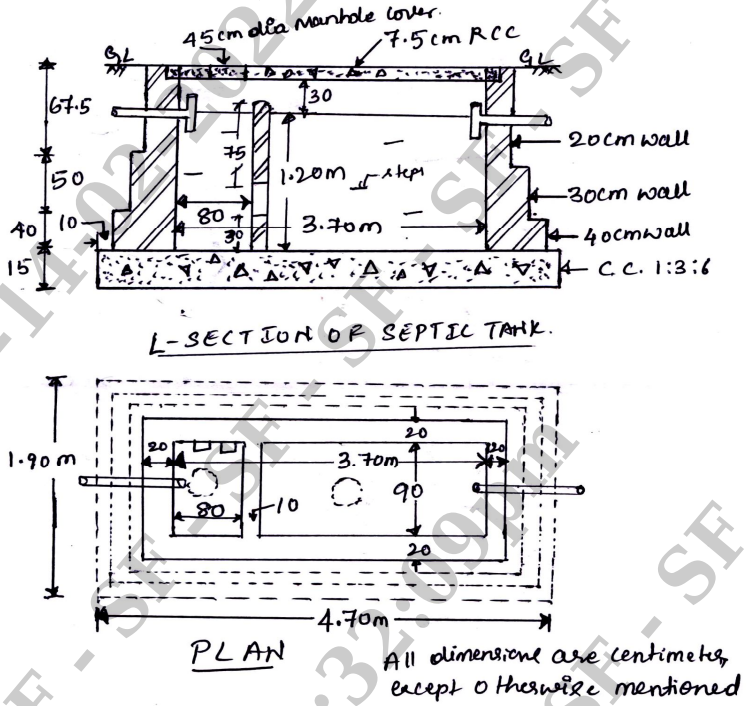


Fig.Q3

OR

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

Dist. in m	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
RL of the 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	119.50
RL of formation	115												
Gradient	Upward gradient 1 in 200							Downward gradient 1 in 400					

Formation width of road is 10m. Side slope 2:1 in banking and 1½ : 1 in cutting. Calculate also the cost of this earthwork in banking and cutting; the rates are Rs. 275/m^3 and Rs. 350/m^3. Adopt Mid-Sectional area method. **(20 Marks)**

Module-3

5 Write detailed specification for following :

(i) Earthwork excavation for foundation
(ii) Damp proof course 2.5cm (1″) C.C. 1 : 1½ : 3
(iii) Burnt brick masonry for superstructure in CM 1:6
(iv) R.C.C. 1 : 2 : 4 for roof slab. **(20 Marks)**

OR

6 Analyse rates from first principle for following :
(i) Cement concrete 1 : 5 : 10 in foundation.
(ii) Ist class brick work in super structure with CM 1:6
(iii) Coursed Rubber stone masonry in CM 1:6 for super structure.
(iv) 12 mm thick internal plastering in CM 1:6 for brick walls. **(20 Marks)**

Module-4

7 What is tender? Explain the departmental procedure of tendering civil works. **(20 Marks)**

OR

8 What are the different types of contracts? Explain any four types of contracts. **(20 Marks)**

Module-5

9 Write a short notes on :
a. Mobilization and equipment advance
b. Secured advance
c. Liquidated damages and bonus
d. Dispute resolution mechanism
e. Performance security. **(20 Marks)**

OR

10 What is valuation? Explain briefly methods of valuation of buildings. **(20 Marks)**

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