EPCET LIBRARY BANGALORE-49

CBCS SCHEME

USN | | | | | | | | | | |

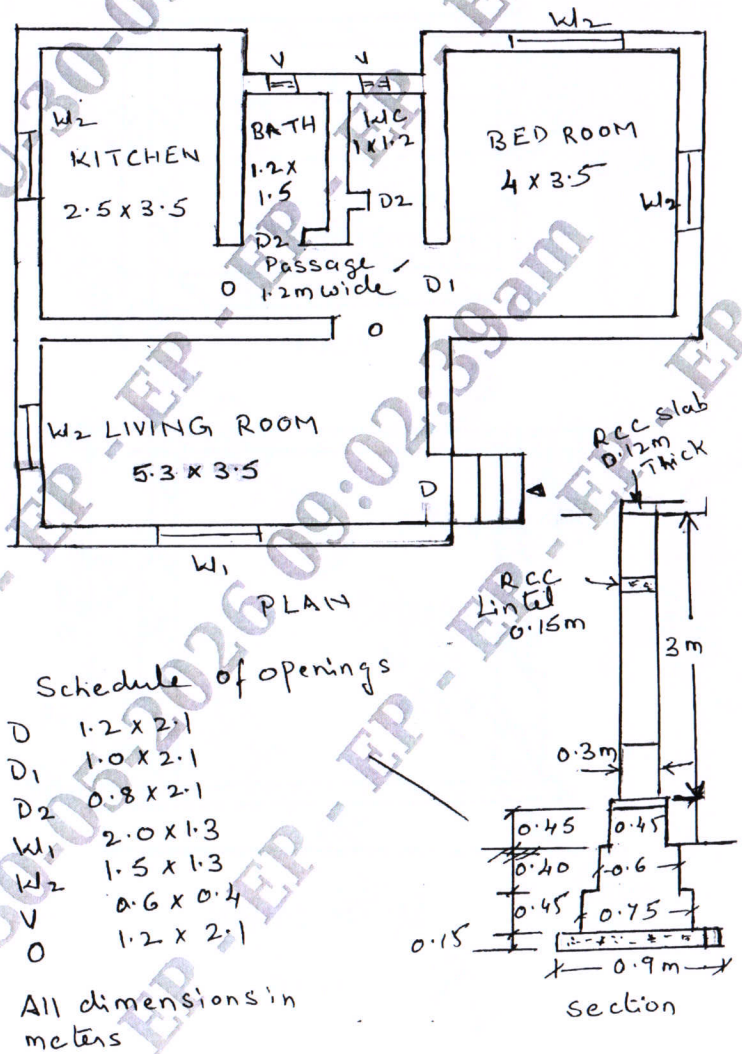
BCV702

Seventh Semester B.E./B.Tech. Degree Examination, June/July 2026
Estimation and Contract Management

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1		The details of residential building are as shown in Fig Q1. Estimate the Quantities and the cost of the following items of work. a) Earthwork excavation for foundation in ordinary soil at Rs 250/m^3 b) Cement concrete bed 1:4:8 for wall foundation at Rs 4200/m^3 c) Size stone Masonry SSM in CM 1:8 for footing and basement foundation at Rs 4300/m^3 d) First class BBM (Burnt Brick Masonry in CM 1:6 at Rs 5000/m^3	**20**	**L3**	**Q.1**



Schedule of openings

D	1.2 x 2.1
D_1	1.0 x 2.1
D_2	0.8 x 2.1
W_1	2.0 x 1.3
W_2	1.5 x 1.3
V	0.6 x 0.4
O	1.2 x 2.1

All dimensions in meters

Fig Q1

		OR			
Q.2		What is an Estimate? Explain briefly purpose and the different types of estimates (any three)	**20**	**L2**	**CO1**
		Module – 2			
Q.3		The details of septic tank are given in Fig Q3. Find the quantities of the following items of works : a) Earthwork excavation for foundation b) PCC bed concrete in 1:4:8 c) Constructing burnt brick masonry in CM 1:4 for side walls d) RCC (1:2:4) for cover slab for septic tank e) Plastering to inner walls	**20**	**L3**	**CO2**

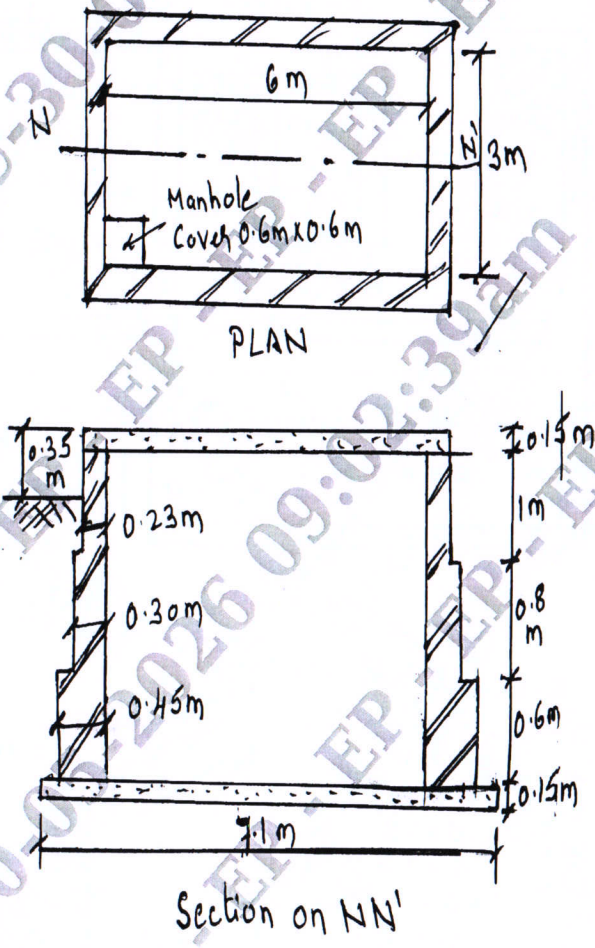


Fig Q3

OR

Q.4 Estimate the quantities and cost of Earth work for a portion of the road from the following data : **20 L2 CO2**

Formation width of the road is 10 m side slopes 2:1 in filling. The cost of filling is Rs 80 per cu.m

The formation wall of 0th chainage is 106.8

RL of FL	106.8	down gradient 1 in 100					
RL of GL	105.42	104.3	104.8	104	102.9	102	102.6
Ch.(m)	0	50	100	150	200	250	300

Module – 3

Q.5 Write the detailed specifications for the following : **20 L2 CO3**

a) Earthwork excavation for foundation

b) Burnt Brick Masonry in CM 1:6

c) Cement plastering in CM 1:4

d) Cement concrete for Roof slab in 1:2:4

OR

Q.6 Workout from first principle the rate analysis for following items **20 L3 CO3**

a) PCC 1:4:8 for foundation using 40 mm and downsize aggregate

b) RCC 1:1.5:3 for roof slab

c) Coursed rubble masonry in CM1:6

d) 12 mm thick plastering in wall in CM 1:4

Module – 4

Q.7 **a.** List the different types of contracts and explain briefly any two types of contracts. **10 L2 CO4**

b. What is Tender? Explain the notice inviting tender. **10 L2 CO4**

VTU-30-05-2026 08:49:49am - EP - EP - EP

		OR			
Q.8		Write short notes on the following : i) Elements of standard tender documents ii) Administrative approval iii) Prequalification iv) Engineering procurement Construction and Build Operate and Transfer Contract.	**20**	**L2**	**CO4**
		Module – 5			
Q.9		Explain briefly the following : i) Earnest Money and Security Deposit ii) Sinking Fund iii) Liquidated damages and bonus iv) Breach of contract	**20**	**L2**	**CO5**
		OR			
Q.10		What is Valuation? Explain the different methods of valuation of buildings briefly.	**20**	**L2**	**CO5**

* * * * *

VTU-30-05-2026 08:49:49am - EP - EP - EP - EP - EP - EP - EP - EP
30-05-2026 09:02:39am - EP - EP - EP - EP - EP - EP - EP - EP