

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025

Seventh Semester

Civil Engineering

CE3701- Estimation, Costing and Valuation Engineering

Regulations - 2021

Duration : 3 Hrs

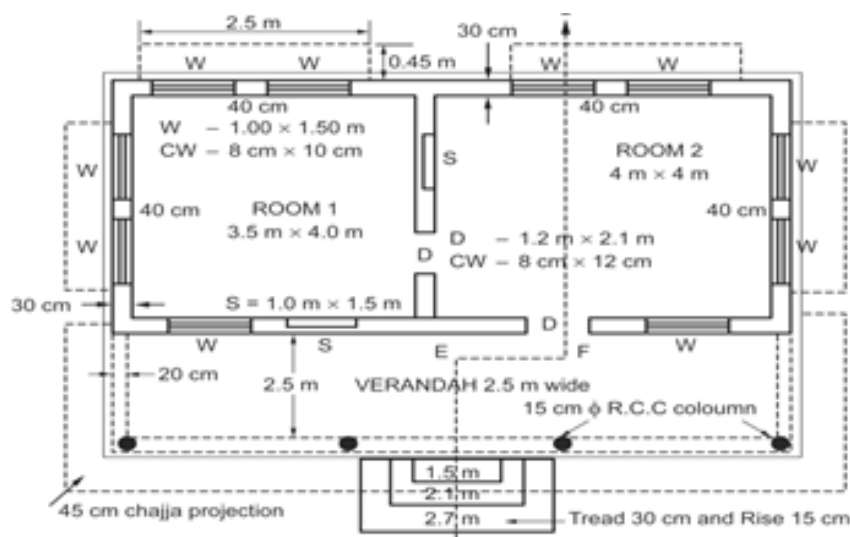
Maximum : 100 Marks

PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BTL	CO	Marks
1.	List the factors to be considered while preparing a detailed estimate.	L1	1	2
2.	Give the units of measurement for the Weathering course & R.C.C 1:2:4 in the roof.	L1	1	2
3.	Identify the rate analysis which helps in budgeting and cost control of a project.	L3	2	2
4.	Define the term Lump-sum.	L1	2	2
5.	Define e-Tendering.	L1	3	2
6.	State the requirement of a report.	L2	3	2
7.	Classify the different types of contract.	L2	4	2
8.	Define the arbitration agreement.	L1	4	2
9.	List down various methods of valuation.	L1	5	2
10.	Write about escalation.	L1	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11. a	For the building shown in the Fig-1, determine the quantities of the following items of work: (i) Earthwork excavation in foundation and plinth (ii) 1 st class brickwork in foundation and plinth	L3	1	16



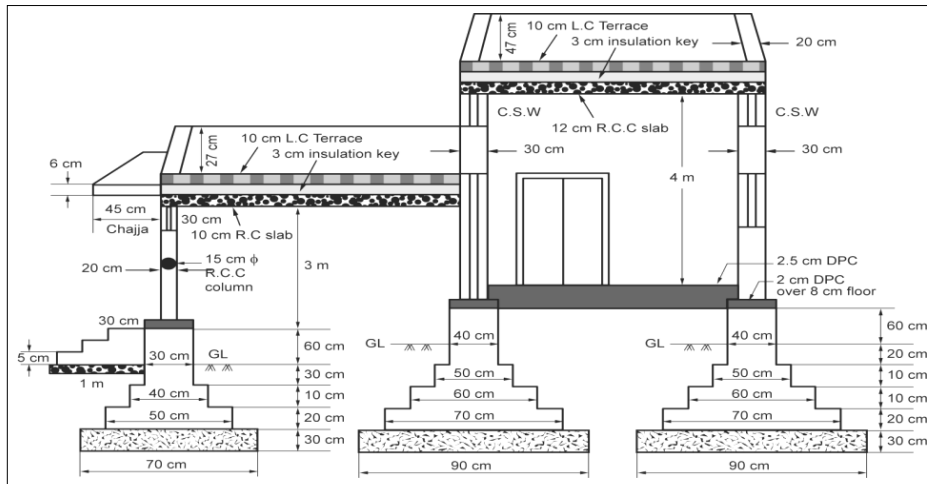


Fig-1

b Find a detailed estimate for the bituminous road shown in Fig-2.

L3 1 16

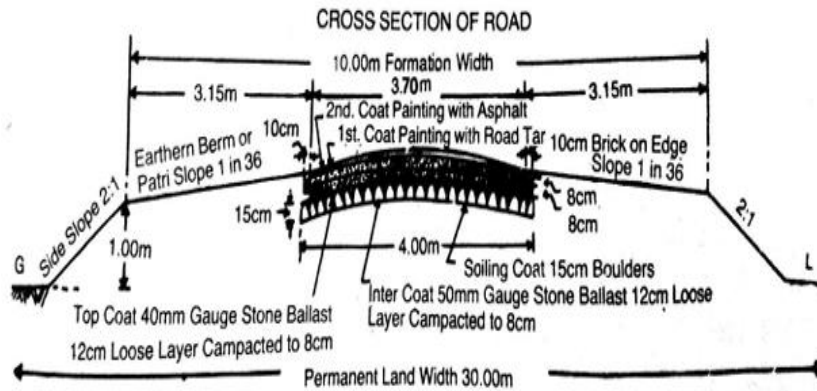


Fig-2

12. a Arrive at the rate/cum of the following item of work of lime concrete in terraced roof (1:3:6) with 25 mm gauge brick ballast with lime and surkhi 1:3 proportion.

L3 2 16

Labour requirement:

For 10 cum of lime concrete in roof terrace.

Mason 1st class – 1/2 no. @ Rs. 550/day

Mason 2nd class – 2 no. @ Rs. 500/day

Mazdoor 1st class – 10 nos. @ Rs. 450/day

Mazdoor 2nd class – 25 nos. @ Rs. 350/day

Coolie – 3 nos. @ Rs. 300/day

Cost of materials

Brick Ballast I – class (25mm gauge) – Rs. 4000/cum

White lime slaked – Rs. 5000/cum

Surkhi – Rs. 2500/cum

Molasses – Rs. 25/kg.

Bail fruit – Take lumpsum Rs. 500.

Or

	b	Develop the rates of Cement plaster with 1:6 mix. Assume your own rates suitably. Given Data: 10 masons, 10 mazdoors and 2 Bhistes can finish 100 sq.m. area in one day.	L3	2	16
13.	a	Discuss the detailed specifications for (i) 1 st class brickwork in buildings (ii) Earthwork excavation and lime concrete Or	L2	3	16
	b	Illustrate the concept of a tender in construction projects and demonstrate your understanding by outlining the major contents of a tender document with suitable justification for their inclusion.	L2	3	16
14.	a	Analyze the process of contract drafting based on IBRD/MORTH standard bidding documents and discuss its significance in ensuring clarity, risk allocation, and compliance in construction projects. Or	L4	4	16
	b	Examine the arbitration and legal requirements in construction projects, and demonstrate their role in ensuring effective project management with suitable justification.	L4	4	16
15.	a	Construct in detail about methods of calculations of depreciation. Or	L3	5	16
	b i	Organize in short note on linear method of calculating depreciation.	L3	5	4
	ii	Age of the building is 10 years. Rate of depreciation is assumed as 15%. Solve the depreciation of the building.	L3	5	12