



**B.E/B.TECH DEGREE EXAMINATIONS: NOV/DEC 2023**

(Regulation 2018)

Seventh Semester

**CIVIL ENGINEERING**

U18CET7001: Estimation, Costing and Valuation

**COURSE OUTCOMES**

- CO1:** Estimate the quantities for buildings, roads, culvert, Septic tank  
**CO2:** Rate Analysis for all Building works, canals, and Roads and Cost Estimate.  
**CO3:** Understand types of specifications, principles for report preparation, tender notices types.  
**CO4:** Gain knowledge on types of contracts.  
**CO5:** Evaluate valuation for building and land.

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 2 = 20 Marks)**

**(Answer not more than 40 words)**

- |  |     |                   |
|--|-----|-------------------|
| 1. List out the difference between Revised Estimate and Supplementary Estimate.  | CO1 | [K <sub>1</sub> ] |
| 2. Estimate the quantities of brickwork and plastering required in a wall 4m long, 3m high and 30 cm thick. Calculate also the cost if the rate of brickwork is Rs.32.00 per cu.m and of plastering is Rs.8.50 per sq.m. | CO1 | [K <sub>3</sub> ] |
| 3. Write a short note on standard schedule of rates.   | CO2 | [K <sub>1</sub> ] |
| 4. Define Lead.  | CO2 | [K <sub>1</sub> ] |
| 5. Identify the necessity of reports.  | CO3 | [K <sub>3</sub> ] |
| 6. What is meant by TTT Act2000?   | CO3 | [K <sub>1</sub> ] |
| 7. Outline the essential requirements of contract.   | CO4 | [K <sub>1</sub> ] |
| 8. Examine the Contract problems.  | CO4 | [K <sub>4</sub> ] |
| 9. Interpret the purpose of valuations.  | CO5 | [K <sub>2</sub> ] |
| 10. Recall the term Depreciation.  | CO5 | [K <sub>1</sub> ] |

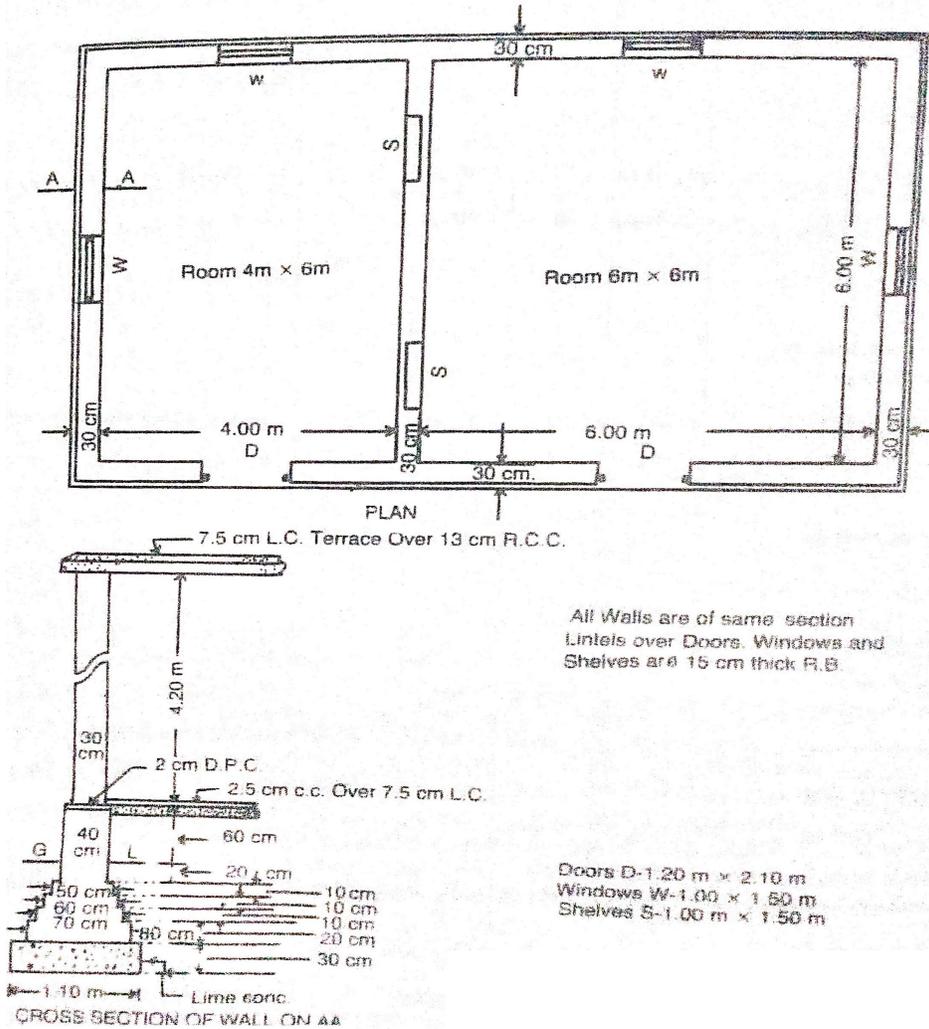
**Answer any FIVE Questions: -**

**PART B (5 x 16 = 80 Marks)**

**(Answer not more than 400 words)**

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|---|----|-----|-------------------|
| 11. a) Explain the methods used to find approximate cost of the building. | 08 | CO1 | [K <sub>2</sub> ] |
|---|----|-----|-------------------|

- b) Construct the quantities of the following items of a two roomed building from 08 CO1 [K3]  
 the given plan and section below. (i) Earthwork in excavation in foundation (ii)  
 Lime Concrete in foundation (iii) 1st class Brickwork in cement mortar 1:6 in  
 foundation and plinth (iv) 2.5cm c.c damp proof course (v) 1st class brickwork  
 in lime mortar in superstructure.



12. a) Prepare the analysis of rate for Lime Concrete in foundation with 40mm brick 08 CO2 [K3]  
 ballast per cu.m. Assume the required data.
- b) Explain in detail on the preparation of analysis of rate for cement concrete 08 CO2 [K2]  
 floor.
13. a) Describe the general specifications of a residential building. 08 CO3 [K2]
- b) Explain in detail about the preparation of tender notice and document. 08 CO3 [K2]

14.	a)	Illustrate the following.	06	CO3	[K2]
		i) Brief specification          ii) Detailed specification			
	b)	Explain E-tendering and Digital signature certificates.	10	CO3	[K2]
15.	a)	Illustrate in detail about Labour Contract and Material Contract.	08	CO4	[K2]
	b)	Develop important particulars in Drafting of contract documents based on IBRD /MORTH Standard bidding documents.	08	CO4	[K2]
16.	a)	Calculate the standard rent of a Government residential building newly constructed from the following data-	10	CO5	[K3]
		(i) Cost of land Rs. 10,000.00.			
		(ii) Cost of construction of the building-Rs. 40,000.00.			
		(iii) Cost of roads within the compound, and fencing-Rs. 20, 00.00.			
		(iv) Cost of electric installation including fans-8% of the cost of building.			
		(v) Cost of electric installation including fans-10% of the cost of building.			
		(vi) Municipal House tax-Rs. 400.00 per annum.			
		(vii) Water tax-Rs. 250.00 per annum.			
		(vii) Property tax-Rs. 140.00 per annum.			
	b)	Discuss the following terms:	06	CO5	[K2]
		(i) Scrap value			
		(ii) Salvage value			
		(iii)Book Value			

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