



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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End - Term Examinations – May/June 2026

Date: 14 – 05- 2026

Time: 01:00pm – 04:00pm

School: SOE	Program: B.Tech-CIV	
Course Code: CIV3001	Course Name: Estimation, Costing and Valuation	
Semester: VI	Max Marks: 100	Weightage: 50%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	04	22	22	28

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	List any four factors to be considered during preparation of detailed estimate.	2 Marks	L1	CO1
2.	List the unit of measurement for Earth work in excavation, dadoing or cladding, steel and nosing.	2 Marks	L1	CO1
3.	Explain the methods for preparing Preliminary Estimate for irrigation channels.	2 Marks	L2	CO1
4.	Explain cost plus fixed fee contract.	2 Marks	L2	CO2
5.	Explain Lump sum contract.	2 Marks	L2	CO2
6.	List two methods of estimation of buildings.	2 Marks	L1	CO3
7.	List any four purposes of valuation of buildings.	2 Marks	L1	CO5
8.	Explain the salvage value.	2 Marks	L2	CO5
9.	Explain market value in the valuation of buildings.	2 Marks	L2	CO5
10.	Explain Annuity in valuation of the building.	2 Marks	L2	CO5

Part B

Answer the Questions.

Total Marks 80M

11.	a.	Prepare an estimate which needs to be prepared in a short duration of time for a building at Rajanukunte having a carpet area of 20000 sq. ft, given the following data. It may be assumed that 35% of built-up areas will be taken up by corridors, verandahs, lavatories, staircases, etc. and 11% of built-up areas will be occupied by wall and other supports. (i) Plinth area rate - Rs. 1000.00 per sq. m (ii) Extra for special Architectural treatment – 1% of the building cost (BC) (iii) Extra for water supply and sanitary installation – 5% of the building cost (iv) Extra for electrical installations – 12% of Building cost (v) Extra for services – 5% of the building cost (vi) Contingencies – 3% (vii) Supervision charges - 8%	15 Marks	L3	CO1
	b.	Explain revised and supplementary estimates.	5 Marks	L2	CO1
Or					
12.	a.	Explain the various objectives of an estimation.	15 Marks	L2	CO1
	b.	Explain preliminary estimation.	5 Marks	L2	CO1

13.	a.	Figure shown below is an RCC column for a construction site at Vijayanagar with foundation footing. Prepare the estimate for the following items to work. A) Earthwork in excavation in foundation, B) Cement concrete 1:4:8 at the base C) RCC work 1:2:4 in footing D) RCC work 1:2:4 in column and E) Steel reinforcing bar.	20 Marks	L3	CO4
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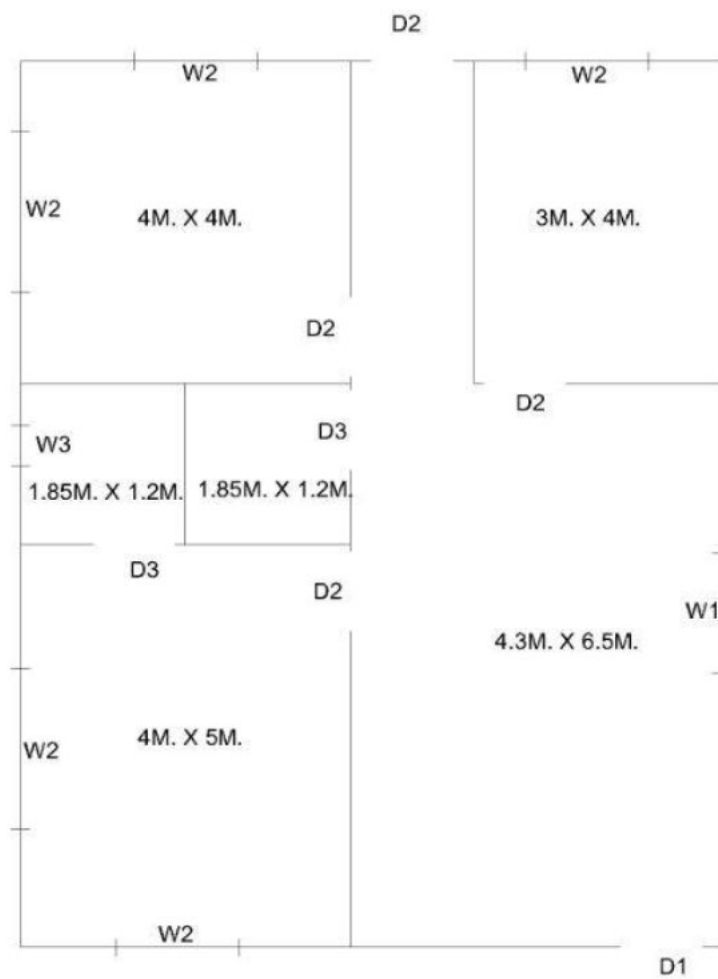
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15.	a.	Taking out the quantities is very important step in estimation. In this context, prepare an estimate for the following items of works by center line method for the building plan whose line diagram is given below. The Fig. show the plan of superstructure wall of a 2 BHK residential building and section represents the cross sections of the walls with foundation. a) Earthwork in excavation in foundation. b) Plain cement concrete (PCC) in foundation. c) Brickwork in foundation and plinth in 1:6 cement mortar. d) First class brickwork in super structure in 1:6 cement mortar, along with deductions for all the openings mentioned in the drawing and lintels over all the openings. Note: All walls are of 30cm thickness, Thickness of lintel is 15cm and bearing of lintel on either side can be taken as 15cm. Schedule of doors	20 Marks	L3	CO3
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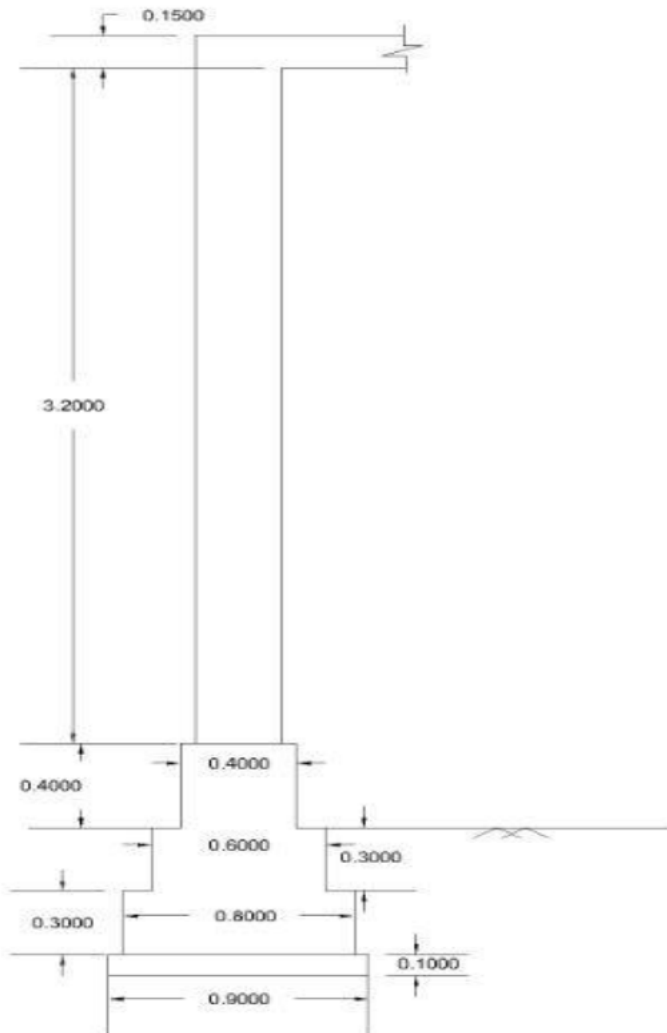
D1 – 1.2m * 2.1m

D2 – 1.0m * 2.1m

D3 – 0.7m * 2.1m

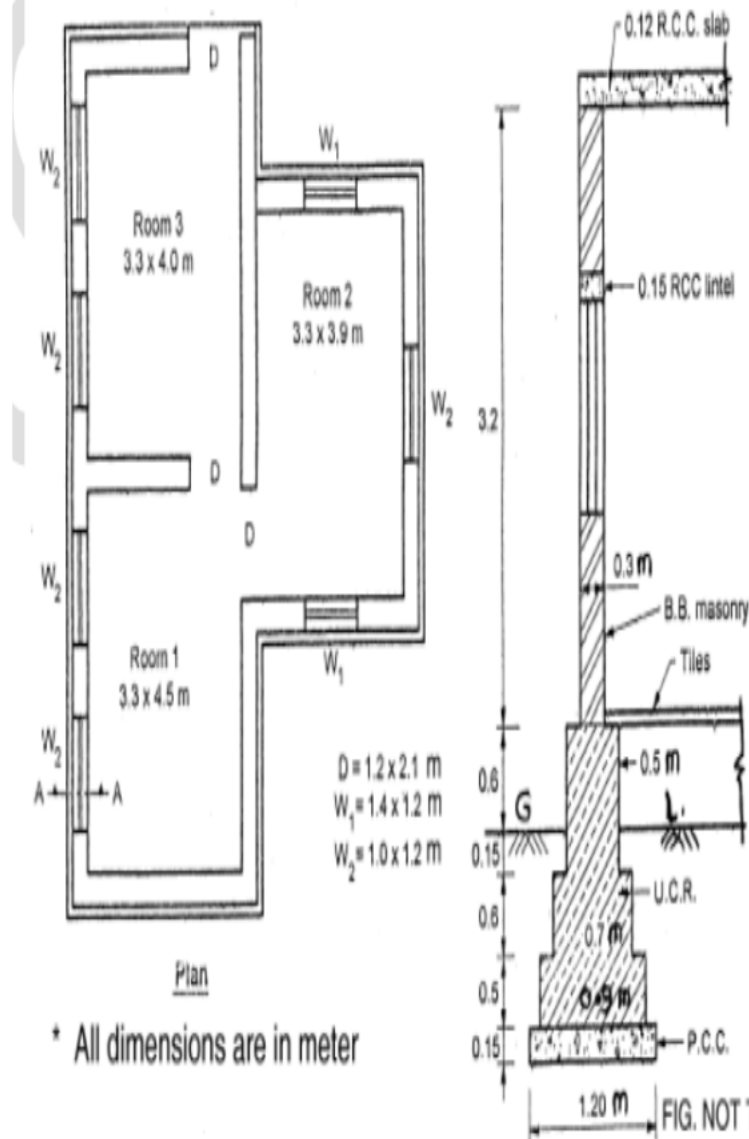


PLAN

		 SECTIONAL ELEVATION			
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Or

16.	a.	Taking out quantities is a very important step in estimation. In this context, prepare an estimate for the following items of work by center line method for the building plan whose line diagram is given below. The Fig. shows the plan of superstructure wall of a 2 BHK residential building and section represents the cross sections of the walls with foundation, along with deductions for all the openings mentioned in the drawing and lintels over all the openings a) Earthwork in excavation in foundation. b) Plain cement concrete (PCC) in foundation. c) Brickwork in foundation and plinth in 1:6 cement mortar. d) First class brickwork in super structure in 1:6 cement mortar	20 Marks	L3	C03
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* All dimensions are in meter

Section of wall at A-A

17.	a.	A four-story building is standing on a plot of 1000 square meters near Malleshwaram. The plinth area of each storey is 500 square meters. The building is RCC framed structure and the life of the building is 60 years. The building fetches the rent of Rs. 2000 per month. Work out the capitalized value of the property based on 7% net yield. For sinking funds, 4% compound interest may be assumed. The cost of land is Rs. 3000 per square meter. Assume a) Repairs as 10% of gross income, b) Municipal tax at 20% of gross rent, c) property tax at 3% of gross rent, d) Insurance premium 2% of gross rent, e) Other miscellaneous charges at 1%	20 Marks	L3	CO5
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		of the gross income. Assume the sinking fund required to be accumulated at the rate of Rs. 200 per square meter of the plinth area.			
Or					
18.	a.	Explain the terms of valuation, scrap value, gross income and net income also state the purpose of valuation of buildings.	20 Marks	L2	C05