000151

PRN:		Course Code :	CET 2701

Final Year **B. Tech** Civil End Semester Examination Winter 2024

Quantity Surveying and Valuation

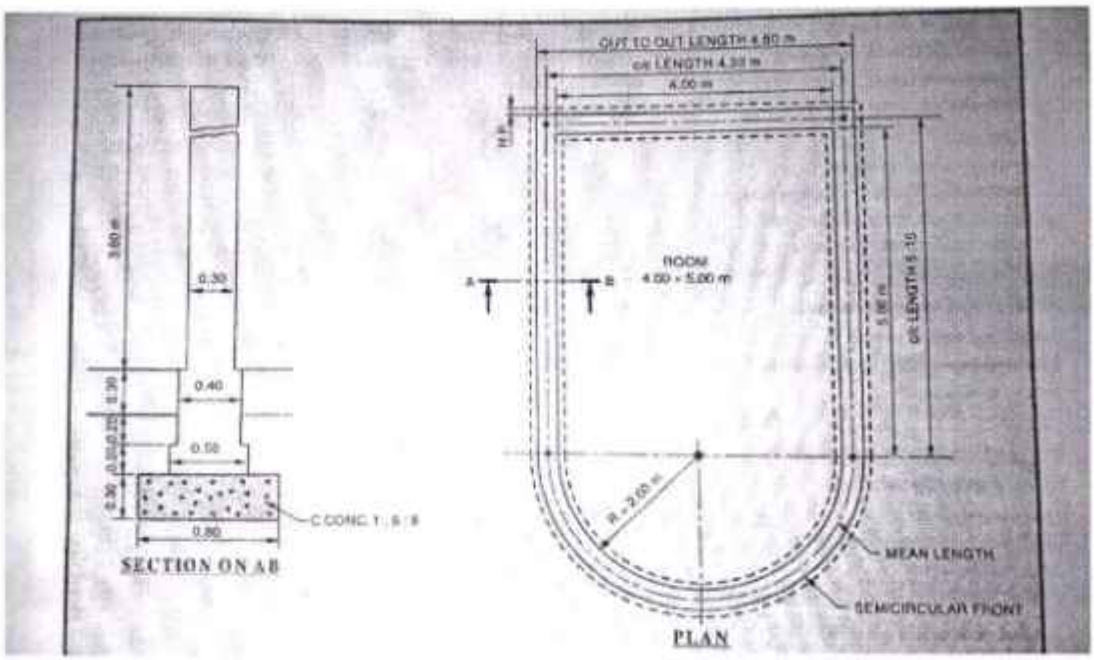
Day and Date: Fri 22 NOV 2024 Max Marks: **100**

Time : 10:30AM To 12:30PM Duration: **04** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Define Estimate and explain various purpose of estimate.	08	03	CO1
	b)	Discuss Specification. Explain Purpose of speciation	08	03	CO1
		OR			
	b)	Explain principles for selecting unit of measurement. Also write Unit of Measurement for following items 1) DPC 2) Skirting 3) Steel Work 4) PCC	08	03	CO1
Q.2		**Attempt the following**			
	a)	Define rate analysis also explain factors affecting rate analysis	08	03	CO2
	b)	Prepare rate analysis for M25 grade concrete take Qty 10 cum	08	04	CO2
		OR			
	b)	Work Out Following quantity for given plan by center line method 1) Excavation in foundation 2) Cement Concrete in foundation 3) Brick work in foundation and plinth 4) Brick work in superstructure	08	04	CO2

ESE



Q.3 **Attempt any two from the following**

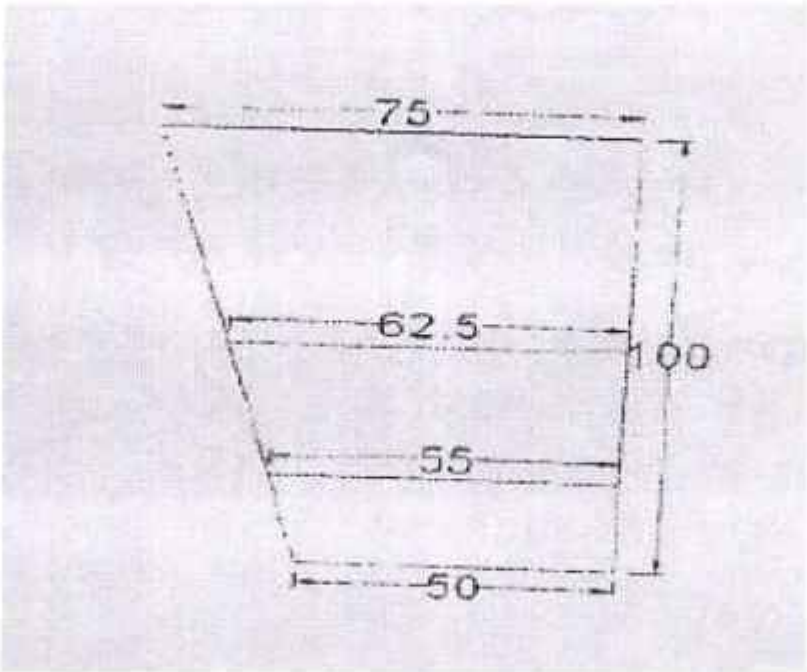
a)	Define approximate estimate also Discuss purposes of approximate estimate.	08	03	CO2
b)	Enlist various methods of approximate estimate, explain any three in detail	08	03	CO2
c)	Prepare Bar bending Schedule for beam having c/s 375 x 425 mm. Overall length of beam is 6.55 m. Reinforcement details is as follows. Draw section at mid span and near to end 1) Anchor / Top Bar – 2 Nos. 20 mm dia. 2) Bent bar at 45^0 – 2 Nos. 20 mm dia. 3) Bottom Straight Bar – 2 Nos. 20 mm dia. 4) Stirrups – 10 mm dia.100 c/c. 5) End Cover -30 mm and side cover 25 mm	08	04	CO2

Q.4 **Attempt any two from the following**

a)	Define contract and explain essentials of legally valid contract.	08	03	CO3
b)	Discuss reasons for rejection of tender.	08	03	CO3
c)	Draft tender notice for construction of Ring Road of 25 km around Kolhapur. Estimated cost is 125 Cr. Assume suitable data	08	04	CO3

ESE

Q.5		**Attempt any Two of the following**			
	a)	Define valuation and explain various purposes of valuation.	09	03	CO4
	b)	Discuss factors affecting valuation of property	09	03	CO4
	c)	Explain Following Terms 1) Building lease 2) Occupation lease 3) Free hold property 4) Sub Lease. 5) Book value	09	03	CO4
Q.6		**Attempt any Two of the following**			
	a)	A concrete mixer was purchased at Rs. 5,50,000/-. Assuming salvage value to be 10 % after 8 years, calculate book value for each year by straight line method and constant percentage method.	09	04	CO4
	b)	Calculate Valuation of a plot shown in figure by belting method. Depth of first belt is 20 m and is valued at Rs. 2000 per sqm.	09	04	CO4



	c)	A G+ 2 storey building is constructed on plot of land measuring 1050 sq m. the built up area for each floor is 475 sq m . the building is of RCC framed structure and other details as follows Find Value of property 1) cost of land = 3050 /sqm 2) Net yield = 10% 3) Future life of Building = 50 years	09	04	CO4

ESE

4) Repair and Maintenance @1/08 of gross rents

5) Municipal Tax @ 30% of gross rent

6) Property tax @ 4% of gross rent

7) Management charges @ 6% of gross rent

8) Insurance Premium @1 .5 % of gross rent

9) Gross rent= 12 lakh per year

10) Compound Interest on sinking fund 10%

11) Construction rate 8500 per sqm

*****

ESE