Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026

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.	Mention two advantages of approximate estimates.	L1	1	2
2.	List two important items included in road estimation.	L1	1	2
3.	Define analysis of rates.	L1	2	2
4.	Outline the importance of market survey in rate analysis.	L2	2	2
5.	Define earnest money deposit (EMD).	L1	3	2
6.	Show two advantages of e-tendering.	L2	3	2
7.	Define litigation in contract administration.	L1	4	2
8.	Mention two differences between arbitration and litigation	L2	4	2
9.	Define capitalized value.	L1	5	2
10.	Define fair rent.	L1	5	2

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

Q.No		*Questions*	*BLT*	*CO*	*Marks*
11.	a	Prepare a detailed estimate of a part of a wall of a building from the given plan and section as shown below fig. 1. (i) Foundation concrete of M 15 Grade. (ii) Foundation and plinth shall be of first-class brick work in cement	L3	1	16

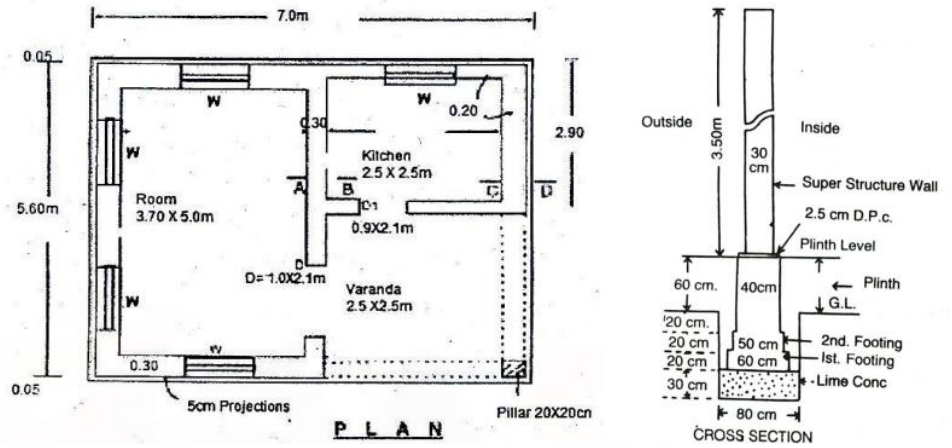

Fig. 1

Or

b	i	Calculate the cost in Rs. of 100 mm thick brick lining of a septic tank of size 5 m x 3 m x 1.5 m, if the rate of lining is Rs. 200 per square meter.	L3	1	4
	ii	Prepare the estimate for the 'Septic Tank' in Fig.2 (i) 1st Class Brickwork in Septic tank & 2nd Class Brick work in Soak pit (ii) Precast RCC work, Water proofing Compounds & Brick Aggregate	L3	1	12

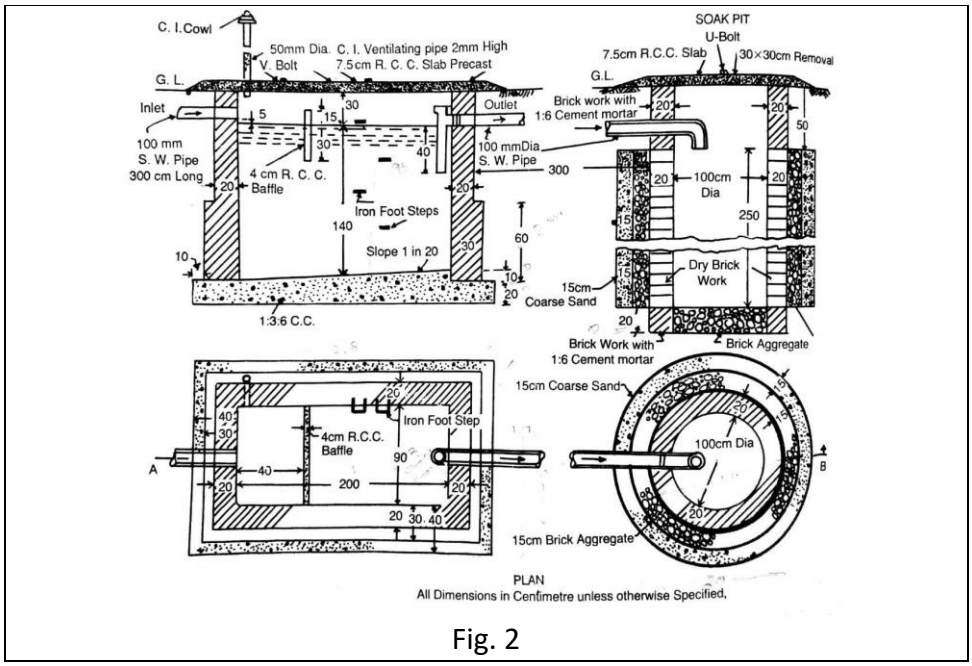

Fig. 2

12.	a	A rate analysis for 1 m³ of brick masonry in cement mortar 1:6. Given Data: • Bricks required = 500 per m³ • Cost of bricks = ₹8 per brick • Cement required = 0.3 m³ per m³ of brickwork • Cost of cement = ₹4500 per m³ • Sand required = 0.9 m³ per m³ of brickwork • Cost of sand = ₹1000 per m³ • Labour for masonry = 40 man-hours per m³ • Wage rate = ₹400 per man-day (1 man-day = 8 hours) Calculate: i) Calculate material cost and labour cost. ii) Determine total cost per m³ of brick masonry.	L3	2	16
		Or			
	b	Develop the role of labour, material, and machinery standard data in civil works cost estimation.	L3	2	16
13.	a	Differentiate between general specifications and detailed specifications with examples.	L2	3	16
		Or			
	b	Illustrate the step-by-step procedure of e-tendering.	L3	3	16
14.	a	Examine the BOT contracts with example.	L3	4	16
		Or			
	b	Analyze the problems commonly faced in construction contracts and suggest remedies.	L3	4	16
15.	a	Discuss the importance of depreciation in valuation. Explain any two methods of calculating depreciation.	L2	5	16
		Or			
	b	Explain the calculation of standard rent for a residential building with assumptions.	L2	5	16