

MANIPAL INSTITUTE OF TECHNOLOGY

SIXTH SEMESTER B.TECH (CIVIL ENGINEERING) END SEMESTER EXAMINATION, MAY 2023 ESTIMATION, COSTING AND VALUATION PRACTICE (CIE 3252)

(- - 2023)

TIME: 3 HRS.

MAX. MARKS: 50

Note: 1. Answer all questions. 2. Any missing data may be suitably assumed.

Q.NO	QUESTION	М	CO
1A	The fig.1. shows the plan of a building and a section through the walls. Estimate the quantity of first-class brick work in super structure main wall using center line method.	5	1
1 B	Explain the method of measurement for plastering on wall masonry in super structure as per IS 1200.	2	1
1C	List the various types of approximate estimates and explain any two of them.	3	1
2A	The fig.1 shows the plan of a residential building and section through the walls. Estimate the quantity of internal plastering.	3	1
28	$\begin{array}{c} c & \hline & 2-\beta 12 \\ \hline & & 3 \underline{\#} @ 75 c/c \\ \hline & & 2-\beta 12 \\ \hline & & & 2-\beta 12 \\ \hline & & & & 200 \\ \hline & & & & & & \\ \hline & & & & & & \\ \hline & & & &$	4	3
2C	Explain the purpose of estimation in construction projects.	3	1
3A	Chainage(50m)0123456RL of ground99.198.2497.2797.296.5395.8994.99Estimate the quantity of earthwork for a proposed road from the chainage 0 to 6 with the help of a neat longitudinal profile. Use the trapezoidal (average end area) formula and prismoidal formula for computing the earthwork. The RL of ground points at each chainage is as given in the 	5	1



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3B	Explain the method of computing volume of earthwork in roads using spot levelling.	3	1
3 C	Distinguish between security deposit and retention money.	2	6
4 A	Write a detailed specification for CR masonry in cement mortar 1:6.	4	2
4 B	Estimate the unit rate for cement concrete 1:2:4 with graded stone chip from 20mm downsize for RC work excluding shuttering and reinforcement.	4	4
4C	Discuss the significance of sinking fund in valuation.	2	5
5A	A building having replacement value of Rs.12,00,000/- stands on a land having an area of 100 m ² and facing the main road. The recent transaction of a similar plot on the adjacent cross road is estimated at Rs. 10,000 per m ² . As per the local market enquiry, the plot on the main road will fetch 20% higher premium on the unit price of land than that of the plot facing cross roads. The building is of RCC framed structure and is 10 years old. It is estimated that the building will have a total life of 60 years. Determine the buying value of the property if the rate of annual sinking fund is 5%.	5	5
5B	Explain the significance of the following from the clients perspective: a. Earnest Money Deposit b. Liquidated damage	3	6
5C	Explain unbalanced tender with suitable example.	2	6

