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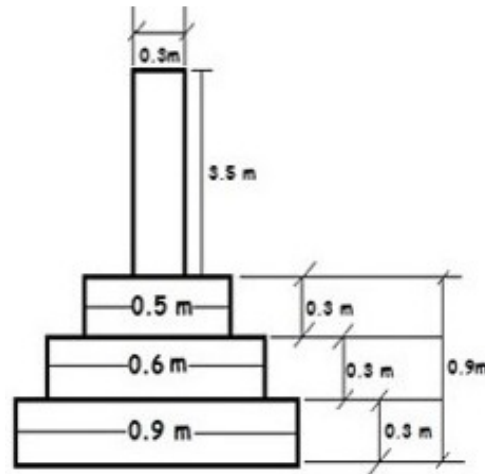


Fig-2

- Q.5 i. What do you understand by price, cost and value? Explain different types of 'value' and factors affecting it. **4**
- ii. Define the term valuation and its purpose. Explain different methods of valuation. **6**
- OR iii. A building costing Rs.7,00,000 has been constructed on a freehold land measuring 100 sqm recently in a big city. Prevailing rate of land in the neighbourhood is Rs. 200 per sqm. Determine the net rent of the property, if the expenditure on an outgoing including sinking fund is Rs. 24,000 per annum. Work out also the gross rent of the property per month. **6**
- Q.6 Attempt any two:
- i. What is E-tendering? Describe various forms of BOT and Global tendering. **5**
- ii. How tenders are invited describe various methods of inviting tenders and tendering procedure. **5**
- iii. Define Contract and Explain Types of Contracts. Describe Pre and post qualification of contractors. **5**

Total No. of Questions: 6

Total No. of Printed Pages:4

Enrollment No.....



Faculty of Engineering
End Sem (Odd) Examination Dec-2019
CE3CO15 Quantity Surveying & Estimation
Programme: B.Tech. Branch/Specialisation: CE

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. _____ is required for preliminary studies of various aspects of a work or project. **1**
(a) Supplementary Estimate (b) Plinth Area Estimate
(c) Revised Estimate (d) Abstract Estimate
- ii. _____ is the amount provided in the estimate and bill of quantities for some specialised work to be done by a specialised firm; whose details are not known at the time of preparing estimate. **1**
(a) Prime cost (b) Provisional sum
(c) Capital cost (d) None of these
- iii. The brick work is not measured in cu m in case of **1**
(a) One or more than one brick wall
(b) Half brick wall
(c) Brick work in arches
(d) Reinforced brick work
- iv. The expected out turn of cement concrete 1:2:4 per mason per day is **1**
(a) 1.5 m³ (b) 2.5 m³ (c) 3.5 m³ (d) None of these
- v. The _____ is the region of the pavement section that is located directly under the surface course. **1**
(a) Sub-base course (b) Grit
(c) Base course (d) Ballast
- vi. While preparing a detailed estimate **1**
(a) Area should be measured correct to 0.01 sqm
(b) Volume should be measured correct to 0.01 cum
(c) Dimension should be measured correct to 0.01 m
(d) All of these

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- vii. Original cost of property minus depreciation **1**
 (a) Book value (b) Salvage value
 (c) Reliable value (d) Obsolence value
- viii. _____ include general office expenses, rents, taxes, supervision and other costs which are indirect expenses and not productive expenses on the job. **1**
 (a) Total costs (b) General costs
 (c) Overhead costs (d) Contingencies
- ix. An invitation to tender might not include? **1**
 (a) Rate list
 (b) Preliminarie
 (c) A letter of invitation to tender
 (d) Design drawing
- x. Among these which is not mentioned in a tender? **1**
 (a) Sign of authority (b) Date
 (c) Designation (d) None of these
- Q.2 i. What do you understand by 'DPR' and enumerate its content **2**
 ii. Describe the components of estimates: face sheet, abstract sheet and measurement sheet? **3**
 iii. Define the term 'estimate'. Explain different types of estimate and their uses? **5**
- OR iv. Write short notes on: **5**
 (a) SOR (b) Work charge establishments
- Q.3 i. Explain the meaning and purpose of rate analysis? **2**
 ii. Workout the rate analysis of the I-class brickwork in superstructure with 20x10x10 cm Brick with 1:6 Cement Sand Mortar for one cubic meter. **8**
- OR iii. Workout the rate analysis for one cubic meter of 1:2:4 RCC work in beams. **8**
- Q.4 i. Differentiate between long wall short wall and centre line method. **3**
 ii. Estimate the cost of earthwork for a portion for 320m length from the ahead data formation width of road is 10m, side slopes are 2:1 in banking and $1\frac{1}{2}$:1 in cutting: **7**

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Station	Distance	R.L. of ground (m)	R.L. of formation (m)
25	1000	51.00	50.00
26	1040	50.90
27	1080	50.50	Downward
28	1120	50.80	gradient
29	1160	50.60	of
30	1200	50.70	1in 200
31	1240	51.20	
32	1280	51.40	
33	1320	51.30	

- OR iii. Estimate by centre line method the quantities of the following items **7**
 of a two roomed building from the given Fig-1 plan and Fig-2 section:
 (a) Earthwork in excavation in foundation,
 (b) Concrete in foundation
 (c) Brickwork in foundation footing
 (d) Brickwork in superstructure

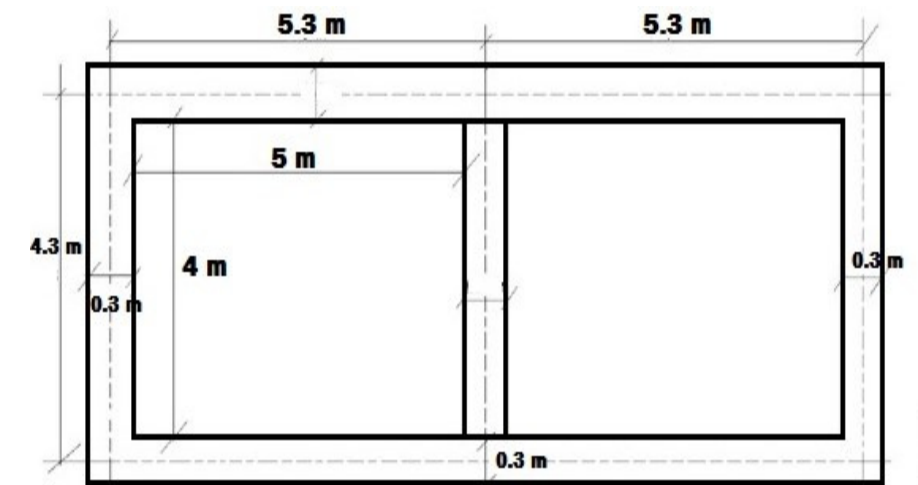


Fig-1

Marking Scheme

CE3CO15 Quantity Surveying & Estimation

Q.1	i.	_____ is required for preliminary studies of various aspects of a work or project. (d) Abstract Estimate	1
	ii.	_____ is the amount provided in the estimate and bill of quantities for some specialised work to be done by a specialised firm; whose details are not known at the time of preparing estimate. (b) Provisional sum	1
	iii.	The brick work is not measured in cu m in case of (b) Half brick wall	1
	iv.	The expected out turn of cement concrete 1:2:4 per mason per day is (d) None of these	1
	v.	The _____ is the region of the pavement section that is located directly under the surface course. (c) Base course	1
	vi.	While preparing a detailed estimate (d) All of these	1
	vii.	Original cost of property minus depreciation (a) Book value	1
	viii.	_____ include general office expenses, rents, taxes, supervision and other costs which are indirect expenses and not productive expenses on the job. (c) Overhead costs	1
	ix.	An invitation to tender might not include? (a) Rate list	1
	x.	Among these which is not mentioned in a tender? (c) Designation	1
Q.2	i.	‘DPR’ Content	1 mark 1 mark
	ii.	Face sheet Abstract sheet Measurement sheet	1 mark 1 mark 1 mark
	iii.	‘Estimate’ Types of estimate Their uses	1 mark 3 mark 1 mark
	OR	iv. Write short notes on: (a) SOR (b) Work charge establishments	5 2.5 marks 2.5 marks

Q.3	i.	Meaning Purpose of rate analysis	1 mark 1 mark	2
	ii.	Items of work Rate analysis	3 marks 5 marks	
	OR	iii. Items of work Rate analysis	3 marks 5 marks	
Q.4	i.	Long wall short wall Centre line method.	1.5 marks 1.5 marks	3
	ii.	L section Formation level with calculation Formula for earth work Earth work cal.	1 mark 2.5 marks 1 mark 2.5 marks	
	OR	iii. Estimate by centre line method the quantities of the following items of a two roomed building from the given Fig-1 plan and Fig-2 section: (a) Earthwork in excavation in foundation, (b) Concrete in foundation (c) Brickwork in foundation footing (d) Brickwork in superstructure	7 2 marks 2 marks 1.5 marks 1.5 marks	
Q.5	i.	Define Types Factors	2 marks 1 mark 1 mark	4
	ii.	Define the term valuation and its purpose. Explain different methods of valuation.	6	
	OR	iii. Valuation Purpose Methods	2 marks 2 marks 2 marks	
Q.6		Attempt any two:		5
	i.	E-tendering Forms of BOT Global tendering.	1.5 marks 2 marks 1.5 marks	
	ii.	Tenders Methods Procedure	1.5 marks 1.5 marks 2 marks	
	iii.	Contract Types of Contracts Pre qualification Post qualification of contractors.	1 mark 1 mark 1.5 marks 1.5 marks	
