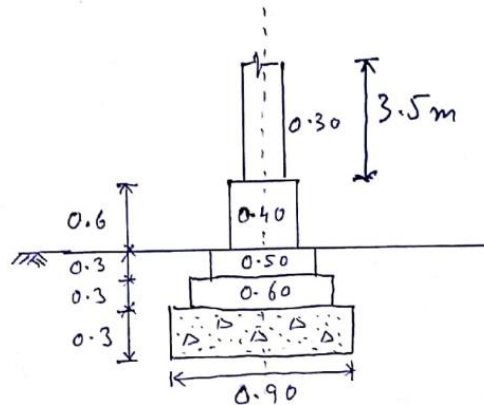
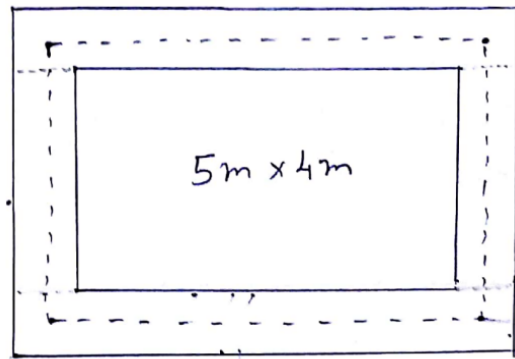


**Internal Assessment Test 1– May- 2022
(solution and scheme of valuation)**

Sub:	Quantity Survey and contract Management					Sub Code:	17CV81	Branch:	Civil
Date:	7/5/2022	Duration:	90 min	Max Marks:	50	Sem/Sec:	VIII – C	marks	
1	<p>What is an Estimate? What are the objectives of estimation? List and explain the uses of an Estimate</p> <p>Estimate: An estimate is the anticipated or probable cost of a work and is usually prepared before the construction is taken up.</p> <p>Objective of an estimate:</p> <ol style="list-style-type: none"> To know the quantity of material To know the labour requirement To know the duration of project To know the project cost. <p>Uses of estimate:</p> <ol style="list-style-type: none"> Estimate is required for inviting tender. Estimate is required to arrange contract It controls the expenditure during the execution of project Estimate of labour, material and cost for project management Valuation of property on “land and building” basis for sale, purchase and mortgage. Fixation of standard rent Valuation of property for insurance Property disputes Property tax calculations Loan fixation Demolition of structure Land acquisition and compensation. 						10		
2	<p>Explain the Revised Estimate method and Supplementary estimate.</p> <p>Revised estimate:</p> <p>Revised Estimate is a detailed estimate and is required to be prepared under any one of the following circumstances</p> <ol style="list-style-type: none"> When the original sanctioned estimate is exceeded or likely to exceed by more than 5%. When the expenditure on a work exceeds or likely to exceed the amount of administrative sanction by more than 10%. When there are material deviation from the original proposal, even though the cost may be met from the sanctioned amount. <p>The revised estimate should be accompanied by a comparative statement showing the variations of each item of works, its quantity, rate and cost under original and revised, side by side, the excess or saving and reason for variation.</p> <p>Supplementary estimate:</p> <p>Supplementary Estimate is a detailed estimate and is prepared when additional works are required to supplement the original works, or when further development is required during the progress of work. This is a fresh detailed estimate of the additional works in addition to the original estimate.</p> <p>The Abstract should show the amount of the original estimate and the total amount including the Supplementary amount for which sanction is required.</p>						[10]		
3	<p>Estimate the quantity of the following items and estimate the cost</p> <ol style="list-style-type: none"> Earthwork in excavation in foundation @ Rs330 per m³ Concrete in foundation @ Rs3000 per m³ Brickwork in foundation and plinth @ Rs2500 per m³ <p>Given the Plan and section on back side of QP</p>						[30]		



c/c length of long wall = $0.3/2 + 5 + 0.3/2 = 5.3\text{m}$

number of long walls = 2

c/c length of short wall = $0.3/2 + 4 + 0.3/2 = 4.3\text{m}$

number of short walls = 2

Item no.	Particulars of item	No.	L	B	H	Q	Remarks
1	Earthwork in excavation in foundation						
	Long wall	2	6.2	0.9	0.9	10.04	$L=5.3 + 0.9/2 + 0.9/2$
	Short wall	2	3.4	0.9	0.9	5.51	$L = 4.3 - 0.9/2 - 0.9/2$
					total	15.55m³	
2	Concrete in foundation and plinth						
	Long wall	2	6.2	0.9	0.3	3.35	$L=5.3 + 0.9/2 + 0.9/2$
	Short wall	2	3.4	0.9	0.3	1.83	$L = 4.3 - 0.9/2 - 0.9/2$
					total	5.18 m³	
3	Brickwork in foundation and plinth						
	Long wall 1 st footing	2	5.9	0.6	0.3	2.13	$L = 5.3 + 0.6/2 + 0.6/2$
	2 nd footing	2	5.8	0.5	0.3	1.74	$L = 5.3 + 0.5/2 + 0.5/2$
	3 rd footing	2	5.7	0.4	0.3	2.74	$L = 5.3 + 0.4/2 + 0.4/2$
	Short wall 1 st footing	2	3.7	0.6	0.3	1.33	$L = 4.3 - 0.6/2 - 0.6/2$
	2 nd footing	2	3.8	0.5	0.3	1.14	$L = 4.3 - 0.5/2 - 0.5/2$
	3 rd footing	2	3.9	0.4	0.3	1.87	$L = 4.3 - 0.4/2 - 0.4/2$
					total	10.45m³	

ABSTRACT

Item no.	particulars of item	quantity	unit	rate	amount
1	earthwork in excavation in foundation	15.55	m3	330	5131.5
2	Concrete in foundation and plinth	5.18	m3	3000	15540
3	Brickwork in foundation and plinth	10.45	m3	2500	26125
				total	46796.5
	add 3% for contingencies				1403.895
	add 2% for work charged establishment				522.5
			grand total		48722.9