

SCHEME OF VALUATION

(Scoring Indicators)

Version ^B Q.

Revision: 2015
 Course Title: Quantity Surveying II & Valuation
 Course code: 5014

Qst No	Scoring Indicator	Split up score	Sub total	Total
PART A				
1	1. (Centreline perimeter of building + 8x0.15)m or Outer perimeter of wall		2	
2.	Name the end support is abutment, 6 m.		2	
3.	1. Brief or general specification 2 Detailed Specification		2	
4.	It is the estimated value of a built-up property at the end of its useful life without being dismantled. This is generally accounted by deducting the depreciation from its new cost		2	
5.	Depreciation is the loss in the value of the property due to its use, life wear, tear, decay and obsolescence. This is an assessment of the physical wear and tear of the building or property and is naturally dependent on its original condition, quality of maintenance and mode of use. Thus the value of a building or property decreases gradually up to the utility period due to depreciation		2	10

PART B								
11	1)	Name of work	No	Measurements in m			Qty	Total Qty
				L	B	H		
		Brick masonry in cm: 6 for septic tank	1	14	0.30	3	12.6	<u>12.6m³</u>
	2)	P.C.C 1:4:8 for foundations given residential building	1	31.5	0.80	0.10	2.52	

		1	7.3	0.80	0.10	0.584		
		4	2.1	0.80	0.10	0.672		
		2	2.4	0.80	0.10	0.384		
		1	0.60	0.80	0.10	0.048		
		1	0.5	0.80	0.10	0.04		6 6
						<u>4.248</u>		
						<u>Say 4.25 m³</u>		
11 3.	Earthwork excavations in ordinary soil for foundations							
	For abutments	2	5.3	0.80	0.75	6.36		3
	For wing walls	4	1.20	0.80	0.75	2.88		3 6
						<u>9.24 m³</u>		
11 4)	R.C.C work 1:2:4 for							
	Stab. Base slab		6.3	3.3	0.12	2.495 m ³		6 6
		+	3.3	0.12				
	Stem	1	30	3	0.50	45.00		3
11 5)	Materials,	1	30	0.60 + 0.20	6	72.00		3 6
	Rubble propeshes, dressings etc.				² Total	<u>117 m³</u>		
	Mortar - using mortar and properly preparation							
	Construction precautions etc.							6 6

11 6)	Book value	Market value
	1) The value is fixed by the rate of depreciation.	1) The value is fixed by Purchased
	2) The value cannot be higher during the subsequent year even due to increase of price index	2) The value may be higher during the subsequent years due to increase of price index.
	3) The value cannot be constant, rather there is a gradual fall	3) The value may be constant for a period.
	4) This is not applicable in case of land or metal articles like steel etc.	4) This is applicable to any type of property.

<p>5) Book value is considered for accounts book of a company.</p> <p>6) Book value is not variable due to its demand and supply or development of the area.</p>	<p>5) Market value is considered for valuation.</p> <p>6) This depends on force of demand and supply development of the area etc.</p>	6x1	6	
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<p>ii) 7)</p>	<p>The main purpose of valuation are as follows -</p> <ol style="list-style-type: none"> 1. Purchase for investment - - 2. Tax fixation 3. Sale. 4. Rent fixation 5. Insurance premiums 6. Security of loans. 7. Compulsory acquisition 8. Speculation 9. Betterment charges 10. Wealth tax 11. Gift tax 12. Probate 13. Partition 14. Assessment of income. 	6	6	2
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iii)		UNIT I		PART C				
a)	Name of work	No	L	B	H	Qty	Total Qty	
	Plastering walls with Cm 1:6, 12mm thick. inside and out side.							
	Out side	1	32.3 30.8		3	96.9		
	<u>Inside</u>							
	store	1	8.6		3	25.8		
	Bed	2	11.4		3	68.4		
	w/c	1	5.6		3	16.8		
	kitchen	1	10.6		3	31.8		
	Dining	1	13.6		3	40.8		

<p>ivb</p>	<p>Cement Concrete 1:4:8</p> <p>For foundation $1 \times 5 \times 3.4 \times 0.3 = 5.1$</p> <p>For floors $1 \times 4 \times 24 \times \frac{0.2+0.33}{2} = 2.544$</p> <p>For job roof $\underline{\underline{7.644 m^3}}$</p>	<p>3</p> <p>3</p> <p>1</p>	<p>7</p>	<p>15</p>
<p>v</p>	<p style="text-align: center;">UNIT II</p> <p>Steel bars including bending in reinforcement <u>Stem</u> Rightside.</p> <p>22mm dia bars 22mm dia main bars @ 40cm/c full height</p> <p>No = $\frac{30 - 2 \times 0.05}{0.4} + 1 = 76$</p> <p>$76 \times 7.53 = 572.28m$ 4</p> <p>22mm dia main bars upto 3.8m ht @ 40cm/c.</p> <p>No = $\frac{29.9 - 2 \times 0.20}{0.4} + 1 = 75$ $75 \times 5.33 = 399.75m$ 4</p> <p>22mm dia main bars up to 1.8m ht @ 20cm/c.</p> <p>No = $\frac{29.90 - 2 \times 0.10}{0.2} + 1 = 150$ Nos $150 \times 3.33 = 499.5$ 4</p> <p style="text-align: right;"><u><u>1472.13m</u></u></p> <p>Total length @ 298kg $4386.9474kg$</p> <p style="text-align: right;"><u><u>4387kg</u></u></p> <p style="text-align: center;">OR</p>	<p>3</p> <p>3</p> <p>4</p> <p>3</p>	<p>15</p> <p>15</p> <p>15</p>	<p>15</p>

VI a	Brick masonry in cm 1:8				
	Abutments	$2 \times 5 \times 0.40 \times 1.57 = 6.28$			
	King wall	$4 \times 1.20 \times 0.40 \times 1.57 = 3.01$			
	Total		<u><u>9.29 m³</u></u>	8	8
VI b	Cement concrete 1:4:8 for foundations -				
	Abutment	$2 \times 5.30 \times 0.80 \times 0.30 = 2.54$			
	King walls	$4 \times 1.20 \times 0.80 \times 0.30 = 1.15$			
			<u><u>3.69 m³</u></u>	7	7

UNIT III

VII a	R.C.C. Work 1:2:4 for wing 20mm broken stone. $1 \times 6.30 \times 3.30 \times 0.12 = 2.495 \text{ m}^3$		<u><u>2.495 m³</u></u>	3	3
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VII b. **BAR BENDING SCHEDULE OF BARS - RCC SLAB.**

Description of Bars	Shape of bending	Length of each m	No	Total length m	Weight Kg.			
Main straight bar 12mm dia		3.44	27	92.88				
Main bent up bars. 12mm dia		3.52	26	91.52				
				<u>184.4</u>				
				@ 0.89	164.12.	6		
Bottom distribution bars. 6mm dia		6.33	18	113.94				
Top distribution bars 6mm dia		6.33	6	37.98				
				<u>151.92</u>				
				@ 0.22	33.42	6	12	15
Total					197.54 kg			
					Say 200			

<p>VIII a</p>	<p>Detailed specification of plastering in cm 1:3, 12mm thick. The joints of the brickwork shall be raked out to a depth of 18mm and the surface of the wall shall be washed and kept wet for two days before plastering. Materials - mortar. - properies, mixing, placing, curing etc -</p>	<p>8</p>	<p>8</p>	
<p>VIII b</p>	<p>Detailed specification for RCC 1:2:4 Steel: - properies. Centering and shuttering Proportion of cement concrete Materials for concrete Mixing, Laying, curing, Finishing Measurement.</p>	<p>7</p>	<p>7</p>	<p>15</p>
<p><u>UNIT IV</u></p>				
<p>IX a</p>	<p>1) Rental method of valuation 2) Direct Comparison with Capital value 3) Valuation based on profit 4) Valuation based on cost 5) Development method 6) Depreciation method.</p>	<p>6x1 =6 2</p>	<p>8</p>	<p>8</p>
<p>IX b</p>	<p>Explanation Cost of building for 90m² @ 3000/m² = 270000/- Assume interest 6% on overall percentage basis Rent per year = $270,000 \times \frac{6}{100} = 16200/-$</p>			

R	<p>Rent per month = $\frac{16200}{12} = 1350/-$</p> <p>Rent per month on the basis of 10% of pay $= 10,000 \times \frac{10}{100}$ $= 1000/-$</p> <p>Chargeable rent is the minimum of the above two = <u>Rs 1000/months</u></p>	3		
Xa	<p>OR.</p> <p>Yearly Sinking fund = $\frac{Si}{(1+i)^n - 1}$</p> <p>$= \frac{50000 \times 0.06}{(1+0.06)^{25} - 1}$</p> <p>$= 911.34$ say 912/</p> <p>Sinking fund :- It is an amount which has to be set aside at fixed intervals of time (say annually) out of the gross income so that at the end of the useful life of the building or property, the fund should accumulate to the initial cost of the property</p>	3 3 1	7	15
Xb	<p>D = $\frac{\text{original cost} - \text{Scrap value}}{\text{life in years}}$</p> <p>$= \frac{2,00,000 - 20,000}{90} = 2000/-$</p> <p>Depreciation for 30 years = 2000×30 $= 60,000/-$</p> <p>Depreciated cost of the building after 30 years - $= 2,00,000/- - 60,000/-$ $= 1,40,000/-$</p> <p>value: - Value means that its worth or utility and Value varies time to time depends largely on the supply of that particular type of property and the extent of the demand for it.</p>	b 2	8	9