

University of Mumbai

Program: Civil Engineering
Curriculum Scheme: Rev2016
Examination: BE Semester: VII

Course Code: CE-C701 and Course Name: Quantity Surveying Estimation & Valuation
Time: 2 hour 30 minutes Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	A valuer shall act with objectivity in his professional dealings by ensuring that his decisions are made _____
OptionA:	without the presence of any bias
OptionB:	with coercion
OptionC:	with confidence
OptionD:	with undue influence of any party
2.	Which is correct
OptionA:	proposal + acceptance= promise
OptionB:	promise +consideration= agreement
OptionC:	agreement + enforceability= contract
OptionD:	agreement+ acceptance= proposal
3.	Technical sanction is initiated after
OptionA:	Technical approval
OptionB:	Administrative approval
OptionC:	Budget approval
OptionD:	PWD approval
4.	Which of the following piece of land would command higher rate of land value in the residential zone?
OptionA:	Having frontage to depth ratio as 2.0
OptionB:	Having frontage to depth ratio as 6.0
OptionC:	Having frontage to depth ratio as 0.2
OptionD:	Having frontage to depth ratio as 0.6
5.	In long and short wall method of estimation, the length of long wall is the Centre-to-Centre distance between the walls and
OptionA:	Breadth of the wall
OptionB:	Half breadth of wall on each side
OptionC:	One fourth breadth of wall on each side
OptionD:	Complete width of wall
6.	The assumption on which the trapezoidal formula for volumes is based, is
Option A:	The end sections are non-parallel planes

Option B:	The mid area of the pyramid is 1.5 times the average area of the ends.
Option C:	The volume of the Prismoidal is over estimated and hence a Prismoidal correction is Applied
Option D:	They are Parallel planes
7.	Before accepting the tender, it is required to check by the process of
Option A:	Arbitration
Option B:	Scrutiny
Option C:	Acceptance of proposal
Option D:	Rejection of proposal
8.	For 100 sq.m cement concrete (1:2:4) 4cm thick floor, the quantity of cement required Is
Option A:	0.9 cu.m
Option B:	0.94 cu.m
Option C:	0.99 cu.m
Option D:	1.0 cu.m
9.	Which one of the following is not a correct method of Alternate Dispute Resolution?
Option A:	Legislation
Option B:	Mediation
Option C:	Conciliation
Option D:	Negotiation
10.	Amount of compensation payable to owner or department by contractor due to delay in construction is known as
Option A:	Price variation
Option B:	Liquidity damage
Option C:	Defect liability
Option D:	Escalation amount

Q2. (20 Marks)	Solve any Four out of Six <i>Please delete the instruction shown in front of every sub question</i> 5 marks each
A	Belting Method of valuation
B	CBRI method
C	Free hold and Lease hold property
D	Differentiate between Cost, Price and Value
E	Explain types of values.
F	Explain Tender Notice

Q3 (20 Marks)	Solve any Two Questions out of Three 10 marks each																																				
A	<p>Calculate the quantities of earthwork for portion of a road for a length of 300m with the following data.</p> <table border="1"> <tr> <td>Chainage (m)</td> <td>0</td> <td>30</td> <td>60</td> <td>90</td> <td>120</td> <td>150</td> <td>180</td> <td>210</td> <td>240</td> <td>270</td> <td>300</td> </tr> <tr> <td>Ground level</td> <td>131.1</td> <td>131.2</td> <td>130.9</td> <td>131.2</td> <td>130.8</td> <td>130.7</td> <td>130.6</td> <td>130.4</td> <td>129.1</td> <td>129.5</td> <td>129.7</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Chainage (m)	0	30	60	90	120	150	180	210	240	270	300	Ground level	131.1	131.2	130.9	131.2	130.8	130.7	130.6	130.4	129.1	129.5	129.7												
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	<p>The formation level at chainage '0' is 130.0 and the road is in a rising gradient of 1 in 150. The width of formation level is 10 m and the side slopes is 1.5:1 in embankment and 1:1 in cutting.</p> <p>Also calculate the cost of this earthwork in banking and cutting, assume suitable rates and draw the profile diagram.</p>																																				
B	<p>A person has purchased a plot of land costing Rs. 7,00,000/- and has constructed a building there on at a cost of Rs. 20,00,000/- Allowing a net return @8.5% on cost of construction and @ 5% net return on the cost of land work out standard rent of the property with the following data:-</p> <p>i) Sinking fund on 4% basis for the future life of 80 years=0.0022 ii) Annual maintenance =0.5% of cost of construction iii) Municipal taxes and other outgoings= 28.5% of gross rent iv) Scrap value at the end of the useful life of the building as 10%</p>																																				

Q4. (20 Marks)	
A	Attempt any Two 5 marks each
i.	Explain Bar Bending Schedule.
ii.	Explain Detailed Estimate.
iii.	What are General Specifications?
B	Solve any One 10 marks each
i.	Draft a tender notice for construction of a sky walk. Estimated cost of construction is Rs.10 Cr. And time of construction is 6 months.
ii.	<p>Work out the quantities from given plan & section</p> <p>a) UCR Masonry in CM (1:5) for foundation</p> <p>b) 1st class Brick Masonry in CM (1:4) in superstructure</p> <p>c) RCC quantity for slab in M25 grade of concrete</p> <p>d) Net quantity of 12mm thick internal plaster in CM (1:4)</p> <p>All dimensions are in meters. a) Chajja thickness-80mm b) Chajja projection-50mm</p>

