



JOIN
VIT QUESTION PAPERS
ON TELEGRAM



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Continuous Assessment Test – II

Programme Name & Branch: B. Tech. Civil Engineering

Maximum Marks: 50 Marks

Course Name & Code: CLE3001 & Quantity Surveying and Estimating

Class Number: 3720

Slot: F2

Exam Duration: 90 mins.

General instruction(s):

Answer all the questions

Section – A (5x 4 = 20 Marks)

Sl. No.	Question
1.	How will be the quantity of earthwork calculated? Which is the most accurate method to calculate?
2.	Plot a cross section and longitudinal section for a portion of road for assumed reduced levels, and show the banking and cutting portion of the assumed values.
3.	How will you differentiate lead and lift for earthwork estimation in roads?
4.	Draw a cranked bar for 50° and calculate the length of cranked bar?
5.	Why cover to reinforcement is provided in beams and slabs? Write the standard cover to be provided for beam and slabs.

Section – B (2 x 15 = 30 Marks)

Sl. No.	Question																						
6.	Estimate the quantity of earthwork for a length 1500 metre from point A to point B at an equal interval of 100 metre. Reduced level of ground values are 50.10, 50.00, 49.50, 48.50, 48.00, 47.60, 49.80, 51.40, 50.50, 47.70 and 48.30. Assume reduced level of formation, upward gradient, downward gradient, formation width and side slope. List out all the assumptions have you made. Draw the longitudinal section of the road. Adopt suitable rates and calculate the cost.																						
7.	<p>The reduced levels taken by using dumpy level for the proposed road are given in the Table below. Estimate the quantity of earthwork in banking and cutting for the R.L of the formation line at the 1st chainage is 116.00m and <u>the road is in the down ward gradient of 1 in 250</u>. The <u>formation width of the road is 15m</u> and the side slope in cutting and banking are 2:1 and 1.5:1 respectively. Consider the length between the chainage is 50m.</p> <table border="1"> <tr> <td>RL of Ground in meter</td> <td>114.5</td> <td>114.75</td> <td>115.25</td> <td>114.7</td> <td>114.5</td> <td>115.2</td> <td>115.7</td> <td>115.9</td> <td>115.2</td> <td>115.0</td> </tr> <tr> <td>Chainage</td> <td>500</td> <td>550</td> <td>600</td> <td>650</td> <td>700</td> <td>750</td> <td>800</td> <td>850</td> <td>900</td> <td>950</td> </tr> </table>	RL of Ground in meter	114.5	114.75	115.25	114.7	114.5	115.2	115.7	115.9	115.2	115.0	Chainage	500	550	600	650	700	750	800	850	900	950
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