

END SEMESTER EXAMINATION, 2021

Semester: 6th (CIVIL)

Subject code: CV-602

Subject: ESTIMATING-II

Full Marks: 56

Duration = 2 hours and 30 minutes

Instructions:

All Questions are compulsory

Assume any missing data

| Question no. | Questions | Marks |
|--------------|--|-------------|
| Question 1 | Fill in the blanks | 1 x 10 = 10 |
| 1(i) | Lead is the _____ distance for which earth work is estimated. | |
| 1(ii) | Nominal roll is a part of _____. | |
| 1(iii) | Measurement book is a special type of notebook of dimension _____. | |
| 1(iv) | _____ is the amount of money which shall be deposited by the contractor whose tender has been accepted. | |
| 1(v) | Unit of measurement of earthwork is _____. | |
| 1(vi) | _____ indicates the incidental expenses of miscellaneous nature which cannot be reasonably predicted under any item or subhead during preparation of estimate. | |
| 1(vii) | Bar reinforcement is measured in weight in _____. | |
| 1(viii) | _____ describe the nature and the class of the work, materials to be used in the work, workmanship etc. and is very important for the execution of the work. | |
| 1(ix) | If the excavated quantity of canal is just sufficient to the quantity of banking then the depth is called _____. | |
| 1(x) | The quantity of work done by a skill labour in one day is called _____. | |

| | | | | | | | | | | | | | | | | |
|--------------|--|--------------|------|------|-------|------|------------|------|--------------|---|----|-----|-----|-----|-----|--|
| Question 2 | Write short note on any five of the following: | | | | | | 3 x 5 = 15 | | | | | | | | | |
| 2(i) | Administrative approval | | | | | | | | | | | | | | | |
| 2(ii) | Labour contract | | | | | | | | | | | | | | | |
| 2(iii) | Earnest money | | | | | | | | | | | | | | | |
| 2(iv) | Measurement book | | | | | | | | | | | | | | | |
| 2(v) | Security money | | | | | | | | | | | | | | | |
| 2(vi) | Tender | | | | | | | | | | | | | | | |
| Question 3 | Answer any four of the following questions | | | | | | 4 x 4 = 16 | | | | | | | | | |
| 3(i) | What are the types of specification? Write about each type in brief. | | | | | | | | | | | | | | | |
| 3(ii) | Write short note on muster roll. | | | | | | | | | | | | | | | |
| 3(iii) | What are the different types of contract? Explain any one type. | | | | | | | | | | | | | | | |
| 3(iv) | What are the factors affecting Rate Analysis? | | | | | | | | | | | | | | | |
| 3(v) | What is lead and lift? | | | | | | | | | | | | | | | |
| Question 4 | Answer any three the following questions: | | | | | | 5 x 3 =15 | | | | | | | | | |
| 4(i) | Analyse the rate of First class brick work with 1:4 cement mortar. | | | | | | | | | | | | | | | |
| 4(ii) | Estimate the quantity of earthwork of a road section of length 100m, formation width 10 m , left side slope= 2:1 and right side slope = 1.5:1 and height at one end is 1.6m and other end 2m. Use any 2 methods and compare the results. | | | | | | | | | | | | | | | |
| 4(iii) | <table border="1"> <tr> <td>RL of ground</td> <td>98.2</td> <td>98.1</td> <td>99.2</td> <td>99.8</td> <td>99.45</td> <td>99.5</td> </tr> <tr> <td>Distance (m)</td> <td>0</td> <td>50</td> <td>100</td> <td>150</td> <td>200</td> <td>250</td> </tr> </table> <p>RL of formation is 98.7 at '0' m. The land has a rising gradient 1 in 200, upto 150m and then downward gradient 1 in 200. Formation width =10m Side slope in banking = 2:1 Side slope in cutting = 1.5:1 Find also the total cost of earthwork. The cost of earthwork for banking is 200/m³ and for cutting 150/m³.</p> | RL of ground | 98.2 | 98.1 | 99.2 | 99.8 | 99.45 | 99.5 | Distance (m) | 0 | 50 | 100 | 150 | 200 | 250 | |
| RL of ground | 98.2 | 98.1 | 99.2 | 99.8 | 99.45 | 99.5 | | | | | | | | | | |
| Distance (m) | 0 | 50 | 100 | 150 | 200 | 250 | | | | | | | | | | |
| 4(iv) | Analyse the rate of Plain cement concrete in foundation (1:4:8), 50mm nominal size | | | | | | | | | | | | | | | |

XXXXXXXXXXXXX-----XXXXXXXXXXXXXXXXXX