## GOVERNMENT POLYTECHNIC JAJPUR A/ P: Ragadi, Block: Korei, Dist.: Jajpur, Odisha- 755019 Website: https://www.gpjajpur.org E-mail: principalgpjajpur@yahoo.co.in Contact: 9437155107

## **DEPARTMENT OF CIVIL ENGINEERING**

## LESSON PLAN

| Discipline:<br>Civil Engg.                               | Semester:<br>3rd                           | Name of the Teaching faculty: Nirupama Sahoo   |
|--|--|--|
| Subject:<br>Estimation &<br>cost<br>evaluation-I<br>Th-4 | No of<br>Days/Wee<br>k class<br>alloted: 4 | Semester from Date: 15.09.2022 To Date:<br>22.12.2022<br>No of weeks: 15                                     |
| Week   | Class Day                                  | Topics   |
| 1st  | 1st  | <ul><li>1.0 INTRODUCTION :</li><li>1.1 Types of estimates – Plinth area, floor area / carpet area</li></ul>  |
|  | 2nd  | 1.2 Units and modes of measurements as per IS 1200<br>1.3 Accuracy of measurement for different item of work |
|  | 3rd  | 2.0QUANTITY ESTIMATE OF BUILDING<br>2.1 Short wall long wall method and centre line method                   |
|  | 4th  | Problems   |
|  | 1st  | deductions in masonry,   |
| 2nd  | 2nd  | Problems   |
| 2110   | 3rd  | plastering,  |
|  | 4th  | Problems   |
| 3rd  | 1st  | white washing,   |
|  | 2nd  | Problems   |
| 510  | 3rd  | painting etc., multiplying factor  |
|  | 4th  | Problems   |
|  | 1st  | painting etc.,   |
| 4th  | 2nd  | for painting of doors and windows (paneled/glazed), grills etc.<br>as per OPWD scheduled of rates.           |
|  | 3rd  | Problems   |
|  | 4th  | Problems   |
| 5th  | 1st  | Problems   |
|  | 2nd  | Problems   |
|  | 3rd  | Detailed estimate of single storied flat roof building with shallow foundation and                           |
|  | 4th  | Problems   |
| 6th  | 1st  | Problems   |
|  | 2nd  | RCC roof slab with leak proof treatment over it including  |
|  | 3rd  | Problems   |
|  | 4th  | Problems   |
| 7th  | 1st  | 2.3Detailed estimate of a simple inclined roof building with gabled / hipped roof                            |

| [     | 2nd | Problems   |
|-------|-----|--|
|       | 3rd | Problems   |
|       | 4th | and A.C. sheet / G.C.I. sheet roofing.                                 |
| L     | 1st | Problems   |
| 8th   | 2nd | Problems   |
|       | 3rd | Problems   |
|       | 4th | 3.0ANALYSIS OF RATES AS PER OPWD                                       |
|       |     | SPECIFICATIONS / STANDARDS   |
|       |     | 3.1 Analysis of rates for cement concrete                              |
| 9th   | 1st | Problems   |
|       | 2nd | Problems   |
|       | 3rd | Problems   |
|       | 4th | brick masonry in Cement Mortar   |
|       | 1st | Problems   |
|       | 2nd | laterite stone masonry in Cement Mortar,                               |
| 10th  | 3rd | Problems   |
|       | 4th | Problems   |
|       | 1st | cement plaster   |
| 11+6  | 2nd | Problems   |
| 11th  | 3rd | white washing ,Artificial Stone flooring,                              |
|       | 4th | Problems   |
|       | 1st | concrete flooring,   |
| 1.2+6 | 2nd | Problems   |
| 12th  | 3rd | R.C.C. with centering and shuttering, reinforcing steel,               |
|       | 4th | Problems   |
|       | 1st | Painting of doors and windows etc                                      |
|       | 2nd | Problems   |
| 13th  | 3rd | 3.2Calculation of lead, lift, conveyance charges, royalty of           |
|       |     | materials, etc. as per Orissa P.W.D. system                            |
|       | 4th | 3.3 Abstract of cost of estimate.                                      |
|       | 1st | 4.0 ADMINISTRATIVE SET-UP OF ENGINEERING                               |
|       |     | ORGANISATIONS  |
| 4.4.1 | 2nd | 4.1Administrative set-up and hierarchy of Engineering Deptt.           |
| 14th  |     | Duties of responsibilities of Engineers at different positions /levels |
|       | 3rd | DOUBT CLEARING CLASSES   |
|       | 4th | PREVIOUS YEAR QUESTION DISCUSSION                                      |
| 15th  | 1st | PREVIOUS YEAR QUESTION DISCUSSION                                      |
|       | 2nd | PREVIOUS YEAR QUESTION DISCUSSION                                      |
|       | 3rd | PREVIOUS YEAR QUESTION DISCUSSION                                      |
|       | 4th | PREVIOUS YEAR QUESTION DISCUSSION                                      |
|       | 1st | CLASS TEST 3, PREVIOUS YEAR QUESTIONS, QUIZ                            |
| 1001  | 151 | CLASS ILST S, FILLVIOUS ILAN QUESTIONS, QUIZ                           |

## LearningResources:

| SI No. | Author Name  | Name of the Book   |
|--------|--|--|
| 1      | M.Chakraborty.   | Estimating, Costing, specification &Valuation in Civil                     |
|        | Estimating<br>B.N.Dutta Estimating   | Engineering<br>B.N.Dutta Estimating &Costing                               |
| 2      | &Costing   | D.N.Dutta Estimating & Osting  |
| 3      | Govt. of Odisha<br>Latest Orissa PWD<br>Schedule of Rates &<br>Analysis of rates | Govt. of Odisha Latest Orissa PWD Schedule of Rates<br>& Analysis of rates |

Nirupama Sahoo FACULTY SIGNATURE