

LESSON PLAN – ESTIMATING, COSTING & VALUATION

Course Code: CEPC 206

Programme: Diploma in Civil Engineering

L-T-P: 3-0-0 | Credits: 3 | Category: PC

Total Theory Contact Hours: 45

Inst-GP Sonapur

Session-2026S

Sl. No.	Week No.	Class No.	Topic
1	1	1	Introduction to Estimating & Costing – Meaning and Purpose
2	1	2	Administrative Approval & Technical Sanction
3	1	3	Types of Estimates – Approximate & Detailed
4	2	4	Roles and Responsibilities of Engineers
5	2	5	Administrative Setup of Engineering Departments
6	2	6	Measurement Sheet & Abstract Sheet Formats
7	3	7	Modes of Measurement as per IS:1200

8	3	8	Rules of Deduction as per IS:1200
9	3	9	Specifications of Items - OPWD / DSR / CPWD / Railways
10	4	10	Detailed Estimate - Definition & Purpose
11	4	11	Data Required for Detailed Estimate
12	4	12	Procedure for Preparation of Detailed Estimate
13	5	13	Long Wall & Short Wall Method
14	5	14	Centre Line Method
15	5	15	Bar Bending Schedule - Footing & Column
16	6	16	Bar Bending Schedule - Beam & Slab
17	6	17	Bar Bending Schedule - Lintel & Chajja
18	6	18	Provisions in Detailed Estimate

19	7	19	Prime Cost, Provisional Sum & BOQ
20	7	20	Detailed Estimate of Residential Building - L/S Method
21	7	21	Detailed Estimate - Centre Line Method
22	8	22	Earthwork Quantity - Mid Sectional Area Method
23	8	23	Mean Sectional Area Method
24	8	24	Prismoidal & Trapezoidal Formula
25	9	25	Detailed Estimate of Septic Tank
26	9	26	Estimate of RCC Culvert
27	9	27	Estimate of Drainage Syphon & Vertical Fall
28	10	28	Estimate of Bituminous Road
29	11	29	Rate Analysis - Definition & Importance
30	11	30	Lead, Lift, Overhead & Water Charges

31	11	31	Contractor's Profit & Procedure of Rate Analysis
32	12	32	Task Work - Definition & Types
33	12	33	Categories of Labour & Wages
34	12	34	Transportation & Machinery Hire Charges
35	13	35	Rate Analysis of PCC
36	13	36	Rate Analysis of Brickwork
37	13	37	Rate Analysis of Plastering
38	14	38	Rate Analysis of Flooring
39	14	39	Rate Analysis of Road Works
40	14	40	Use of Schedule of Rates - Odisha Govt.
41	15	41	Numerical Practice - Estimating
42	15	42	Numerical Practice - Rate Analysis
43	15	43	Revision - Units I & II

44	15	44	Revision - Units III & IV
45	15	45	Model Test / Discussion

M. Khan
22/12/25

Approved by

P. J.
22/12/25