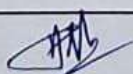
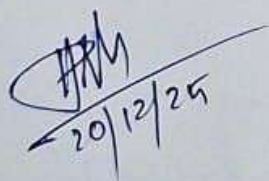


Discipline: CIVIL	Semester: 4th	Name of Teaching Faculty: Sri Prakash Chandra Murmu
Subject: ESTIMATING COSTING AND VALUATION	No of Days/Week Class allotted:- 03	Semester from date: 22.12.2025 to 18.04.2026 No of Weeks: 15
Week	Class Day	Theory Topics
1st	1st	1. Fundamentals of Estimating and Costing: Estimating and Costing – Meaning, purpose, administrative approval, Technical Sanction
	2nd	Types of methods of estimates – Approximate and Detailed estimate.
	3rd	Types of methods of estimates – Approximate and Detailed estimate.
2nd	1st	Roles and responsibility of Engineers at different positions/levels, administrative set ups and heirarchy of Engineering Dept. in State Govt./Central Govt./PSUs
	2nd	Standard formats of Measurement sheet, Abstract sheet
	3rd	Modes of measurement and desired accuracy in measurements for different items of work as per IS:1200.
3rd	1st	Rules for deduction in different category of work as per IS:1200
	2nd	Description / specification of items of building work as per OPWD /DSR. /CPWD/Railways
	3rd	2. Detailed Estimate : Detailed Estimate- Definition and Purpose, Data required for detailed estimate
4th	1st	Civil cost, GST, Contingencies, Supervision charges
	2nd	Procedure for preparation of detailed estimate
	3rd	Long wall and Short wall method, Centre line method
5th	1st	Bar bending schedule for footing, column, beam, Lintel, chajja and slab elements
	2nd	Bar bending schedule for footing, column, beam, Lintel, chajja and slab elements
	3rd	Provisions in detailed estimate: contingencies, work charged establishment, percentage charges, water supply and sanitary Charges and electrification charges etc.
6th	1st	Prime cost, Provisional sum, Provisional quantities, Bill of quantities, Spot items or Site items.
	2nd	Prime cost, Provisional sum, Provisional quantities, Bill of quantities, Spot items or Site items.
	3rd	Detailed estimate of residential buildings using long wall short wall and centre line method
7th	1st	Detailed estimate of residential buildings using long wall short wall and centre line method
	2nd	Detailed estimate of residential buildings using long wall short wall and centre line method
	3rd	Detailed estimate of residential buildings using long wall short wall and centre line method
	1st	Detailed estimate of residential buildings using long wall short wall and centre line method



8th	2nd	Detailed estimate of residential buildings using long wall short wall and centre line method
	3rd	3. Estimate for Civil Engineering Works: Earthwork - Quantities for roads, Embankment and canal by – Mid sectional area method, mean sectional area method, Prismoidal and trapezoidal formula method.
9th	1st	Earthwork - Quantities for roads, Embankment and canal by – Mid sectional area method, mean sectional area method, Prismoidal and trapezoidal formula method.
	2nd	Earthwork - Quantities for roads, Embankment and canal by – Mid sectional area method, mean sectional area method, Prismoidal and trapezoidal formula method.
	3rd	Detailed estimate for septic tank
10th	1st	Detailed estimate for septic tank
	2nd	Detailed estimate for septic tank
	3rd	Estimate of RCC culvert, drainage syphon and vertical fall
11th	1st	Estimate of RCC culvert, drainage syphon and vertical fall
	2nd	Estimate of RCC culvert, drainage syphon and vertical fall
	3rd	Estimate of Bituminous Road
12th	1st	Estimate of Bituminous Road
	2nd	Estimate of Bituminous Road
	3rd	4. Rate Analysis: Rate Analysis: Definition, purpose and importance.
13th	1st	Lead (Standard and Extra), lift, overhead charges, water charges and contractors' profit, procedure for rate analysis
	2nd	Task work- Definition, types. Task work of different skilled labour for different items.
	3rd	Categories of labours, their daily wages, types and number of labours for different items of work.
14th	1st	Transportation charges of materials - Lead and Lift, Hire charges of machineries and equipment.
	2nd	Preparing rate analysis of different items of work pertaining to buildings and roads. (Different items of work like PCC, Plastering, Flooring, and Brick work)
	3rd	Preparing rate analysis of different items of work pertaining to buildings and roads. (Different items of work like PCC, Plastering, Flooring, and Brick work)
15th	1st	Preparing rate analysis of different items of work pertaining to buildings and roads. (Different items of work like PCC, Plastering, Flooring, and Brick work)
	2nd	Preparing rate analysis of different items of work pertaining to buildings and roads. (Different items of work like PCC, Plastering, Flooring, and Brick work)
	3rd	Preparing rate analysis of different items of work pertaining to buildings and roads. (Different items of work like PCC, Plastering, Flooring, and Brick work)



20/12/25