Government polytechnic, Malkangiri

Lesson plan: ESTIMATION & COST EVALUATION – I

Discipline: Civil enginering	**Semester : 3rd**	**Name of Teaching faculty: P.P. PATRO**
Subject: E&CE-I	No. of days/ per week class alloted: 4	**Semester from Date: 15/ 09/2022 To Date: 21/01/22023**
Week	**Class Day**	**Topics**
		1. **Introduction**
1st	1ST	1.1 Types of estimates – Plinth area, floor area / carpet area
	2ND	1.2 Units and modes of measurements as per IS 1200 1.3 Accuracy of measurement for different item of work
		2. **Quantity Estimate of Building**
	3rd	2.1 Short wall long wall method
	4th	2.1 centre line method,
2nd	1st	2.1 deductions in masonry, plastering, white washing, painting etc.,
	2nd	2.1 deductions in masonry, plastering, white washing, painting etc.,
	3rd	2.1 multiplying factor (paint coefficients) for painting of doors and windows (paneled/glazed), grills etc.
	4th	2.1 multiplying factor (paint coefficients) for painting of doors and windows (paneled/glazed), grills etc.
3rd	1st	2.1 multiplying factor (paint coefficients) for painting of doors and windows (paneled/glazed), grills etc.
	2nd	2.2 Detailed estimate of single storied flat roof building with shallow foundation
	3rd	2.2 Detailed estimate of single storied flat roof building with shallow foundation
	4th	2.2 Detailed estimate of single storied flat roof building with shallow foundation
4th	1st	2.2 Detailed estimate of single storied flat roof building with shallow foundation
	2nd	2.2 Detailed estimate of single storied flat roof building with shallow foundation
	3rd	2.2 Detailed estimate of single storied flat roof building with shallow foundation
	4th	2.2 Detailed estimate of single storied flat roof building with

		shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
5th	1st	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	2nd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	3rd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	4th	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room
6th	1st	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	2nd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	3rd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	4th	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
7th	1st	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	2nd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	3rd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	4th	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
8th	1st	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	2nd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
	3rd	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment

		over it including staircase and mumty room.
	4th	2.2 Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.
9th	3. Analysis of Rates and Valuation	
	1st	3.1 Analysis of rates for cement concrete
	2nd	3.1 Analysis of rates for cement concrete
	3rd	3.1 Analysis of rates for cement concrete
	4th	3.1 brick masonry in Cement Mortar,
10th	1st	3.1 brick masonry in Cement Mortar,.
	2nd	laterite stone masonry in Cement Mortar, cement plaster, white washing,
	3rd	Artificial Stone flooring
	4th	Artificial Stone flooring
11th	1st	Tile flooring, concrete flooring, R.C.C. with centering and shuttering, reinforcing steel, Painting of doors and windows etc. as per OPWD.
	2nd	3.2 Calculation of lead, lift, conveyance charges, royalty of materials, etc. as per Orissa P.W.D. system (Concept of C.P.W.D./Railways provisions)
	3rd	3.2 Calculation of lead, lift, conveyance charges, royalty of materials, etc. as per Orissa P.W.D. system (Concept of C.P.W.D./Railways provisions)
	4th	3.2 Calculation of lead, lift, conveyance charges, royalty of materials, etc. as per Orissa P.W.D. system (Concept of C.P.W.D./Railways provisions)
12th	1st	3.3 Abstract of cost of estimate.
	2nd	3.3 Abstract of cost of estimate.
	3rd	3.4 Valuation- Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolesce, methods of valuation.
	4th	3.4 Valuation- Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolesce, methods of valuation.
11th	1st	3.4 Valuation- Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolesce, methods of valuation.
	2nd	3.4 Valuation- Value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolesce, methods of valuation.
	4. **Administrative Set-Up of Engineering Organisations:**	
	3rd	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc. Duties and responsibilities of Engineers at different positions /levels.

	4th	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc. Duties and responsibilities of Engineers at different positions /levels.
12th	1st	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc. Duties and responsibilities of Engineers at different positions /levels.
	2nd	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc. Duties and responsibilities of Engineers at different positions /levels.
	3rd	PYQ
	4th	PYQ