

Lesson Plan:

(4 periods per week, total 60 periods in SEM)

DISCIPLINE: Civil Engineering	SEMESTER: 3 rd Semester	NAME OF THE TEACHING FACULTY: P.P. Patro Sr. Lecturer (Civil Engg.)
SUBJECT: Estimation & Cost Evaluation- 1	NO OF DAYS/PER WEEK CLASSES ALLOTTED: 4	SEMESTER FROM DATE: 01.08.2023 TO DATE : _____ NO OF WEEKS: 15

Week	Class Day	Topics
		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
	3rd	1.3 Accuracy of measurement for different item of work
	4th	1.3 Accuracy of measurement for different item of work
2nd		Quantity Estimate Of Building
	1 ST	2.1 Short wall long wall method and centre line method,
	2 ND	deductions in masonry,
	3 RD	plastering, white washing, painting etc
	4 TH	multiplying factor (paint coefficients) for painting of doors and windows (paneled/glazed), grills etc.
3rd	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 mummy room.
	2nd	Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mummy room.
	3rd	Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mummy room.

	4 th	Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mummy room.
		Analysis Of Rate and Valuation
4th	1 st	3.1 Analysis of rates for cement concrete,
	2 nd	brick masonry in Cement Mortar,
	3 rd	laterite stone masonry in Cement Mortar,
	4 th	cement plaster
5th	1 st	white washing,
	2 nd	Artificial Stone flooring,
	3 rd	Tile flooring, concrete flooring
	4 th	R.C.C. with centering and shuttering
6th		4.Natural Resource (Energy)
	1 st	reinforcing steel,
	2 nd	Painting of doors and windows etc. as per OPWD.
	3 rd	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)
	4 th	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)
7th		4.Natural Resource (Land)
	1 st	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)
	2 nd	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)
	3 rd	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)
	4 th	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)
8th	1 st	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)
	2 nd	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)
	3 rd	Abstract of cost of estimate.
	4 th	Abstract of cost of estimate.

9 th	1 st	Abstract of cost of estimate.
	2 nd	Abstract of cost of estimate.
	3 rd	Abstract of cost of estimate.
	4 th	Valuation- Value and cost,
10 th	1 st	Valuation- Value and cost,
	2 nd	scrap value, salvage value, assessed value,
	3 rd	scrap value, salvage value, assessed value,
	4 th	scrap value, salvage value, assessed value,
11 th	1 st	scrap value, salvage value
	2 nd	sinking fund
	3 rd	depreciation and obsolesce
	4 th	depreciation and obsolesce
12 th	1 st	methods of valuation.
	2 nd	methods of valuation.
		Administrative Set -Up Of Engineering Organisation
	3 rd	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
	4 th	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
13 th	1 st	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
	2 nd	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
	3 rd	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
	4 th	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
14 th	1 st	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
	2 nd	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc.
	3 rd	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc

	4 th	4.1 Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc
15th	1 st	Duties and responsibilities of Engineers at different positions /levels.
	2 nd	Duties and responsibilities of Engineers at different positions /levels.
	3 rd	Duties and responsibilities of Engineers at different positions /levels.
	4 th	Duties and responsibilities of Engineers at different positions /levels.