Lesson Plan:

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

DISCIPLINE: Civil Engineering	**SEMESTER:6th** Semester	**NAME OF THE TEACHING FACULTY:** P.P. Patro Sr. Lecturer
SUBJECT: Estimation & Cost Evaluation-I	**NO OF DAYS/PER WEEK CLASSES ALLOTTED:**4	**SEMESTER FROM DATE:01.07.2024 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**
	1ST	2.1 Short wall long wall method and centre line method,
	2ND	deductions in masonry,
	3RD	plastering, white washing, painting etc
	4TH	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 mumty 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 mumty 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 mumty room.

	4th	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.
		Analysis Of Rate and Valuation
4th	1st	3.1Analysis of rates for cement concrete,
	2nd	brick masonry in Cement Mortar,
	3rd	laterite stone masonry in Cement Mortar,
	4th	cement plaster
5th	1st	white washing,
	2nd	Artificial Stone flooring,
	3rd	Tile flooring, concrete flooring
	4th	R.C.C. with centering and shuttering
6th		**4.Natural Resource (Energy)**
	1st	reinforcing steel,
	2nd	Painting of doors and windows etc. as per OPWD.
	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)
7th		**4.Natural Resource (Land)**
	1st	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)
	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)
8th	1st	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)
	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	Abstract of cost of estimate.
	4th	Abstract of cost of estimate.

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

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