

<b>LESSON PLAN: (ESTIMATION &amp; COST EVALUATION – I)</b>		
<b>Discipline :</b>	<b>CIVIL ENGINEERING</b>	
<b>Faculty :</b>	<b>DILESWAR SAHOO</b>	
<b>Semester :</b>	<b>3RD</b>	
<b>Duration :</b>	<b>14 WEEKS (1<sup>ST</sup> AUGUST 2023 to 30<sup>TH</sup> NOVEMBER 2023)</b>	
<b>Work Load :</b>	<b>Lecture :</b>	<b>4 Lectures per week (50 minutes per Class)</b>
<b>Week</b>	<b>Week Day</b>	<b>Theory</b>
1 <sup>st</sup>	1 <sup>st</sup>	Introduction : Types of estimates
	2 <sup>nd</sup>	Terminology
	3 <sup>rd</sup>	Principal of measurement
	4 <sup>th</sup>	Approximate estimate
2 <sup>nd</sup>	5 <sup>th</sup>	Detailed estimate
	6 <sup>th</sup>	Quantity Estimate of Building : Short wall method
	7 <sup>th</sup>	Example 1of short wall method
	8 <sup>th</sup>	Example 2 of short wall method
3 <sup>rd</sup>	9 <sup>th</sup>	Example 3 of short wall method
	10 <sup>th</sup>	Example 4 of short wall method
	11 <sup>th</sup>	Long wall method
	12 <sup>th</sup>	Example 1 Long wall method
4 <sup>th</sup>	13 <sup>th</sup>	Example 2 of Long wall method
	14 <sup>th</sup>	Example 3 of Long wall method
	15 <sup>th</sup>	Example 4 of Long wall method
	16 <sup>th</sup>	centre line method
5 <sup>th</sup>	17 <sup>th</sup>	Example 1 of centre line method
	18 <sup>th</sup>	Example 2 of center line method
	19 <sup>th</sup>	Example 3 of center line method
	20 <sup>th</sup>	Example 4 of center line method
6 <sup>th</sup>	21 <sup>st</sup>	deductions in masonry, plastering
	22 <sup>nd</sup>	white washing
	23 <sup>rd</sup>	painting
	24 <sup>th</sup>	multiplying factor (paint coefficients) for painting of doors and windows
7 <sup>th</sup>	25 <sup>th</sup>	for painting of doors and windows and grills
	26 <sup>th</sup>	Problems discussion on painting, white washing etc
	27 <sup>th</sup>	Details of measurement and calculation of quantities
	28 <sup>th</sup>	main item in the building work
8 <sup>th</sup>	29 <sup>th</sup>	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.
	30 <sup>th</sup>	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.
	31 <sup>st</sup>	Analysis of rates for cement concrete,
	32 <sup>nd</sup>	Analysis of rates for brick masonry in Cement Mortar

9 <sup>th</sup>	33 <sup>rd</sup>	late rite stone masonry in Cement Mortar
	34 <sup>th</sup>	cement plaster, white washing
	35 <sup>th</sup>	Artificial Stone flooring, Tile flooring, concrete flooring,
	36 <sup>th</sup>	R.C.C. with centering and shuttering
10 <sup>th</sup>	37 <sup>th</sup>	reinforcing steel
	38 <sup>th</sup>	Painting of doors and windows
	39 <sup>th</sup>	Calculation of lead, lift,
	40 <sup>th</sup>	conveyance charges
11 <sup>th</sup>	41 <sup>st</sup>	royalty of materials
	42 <sup>nd</sup>	Orissa P.W.D. system
	43 <sup>rd</sup>	Concept of C.P.W.D./Railways provisions
	44 <sup>th</sup>	Concept of C.P.W.D./Railways provisions
12 <sup>th</sup>	45 <sup>th</sup>	Abstract of cost of estimate
	46 <sup>th</sup>	Value and cost
	47 <sup>th</sup>	scrap value, salvage value
	48 <sup>th</sup>	assessed value
13 <sup>th</sup>	49 <sup>th</sup>	sinking fund,
	50 <sup>th</sup>	depreciation and obsolesce
	51 <sup>st</sup>	methods of valuation
	52 <sup>nd</sup>	methods of valuation
14 <sup>th</sup>	53 <sup>rd</sup>	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc
	54 <sup>th</sup>	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc
	55 <sup>th</sup>	Duties and responsibilities of Engineers at different positions /levels.
	56 <sup>th</sup>	Duties and responsibilities of Engineers at different positions /levels.