

**KIIT POLYTECHNIC**  
Department of Civil Engineering

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***LESSON PLAN***

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**Session** :: Winter – 2022  
**Course Type** :: Theory  
**Semester/Branch** :: 3<sup>rd</sup> Semester, civil Engineering  
**Subject (with code)** :: Estimation & cost evaluation-1 (Theory-4)  
**Contact hours/week** :: 4 hours  
**Name of Faculty** :: Ananyashree moharana

SL. No.	CLASS ID	COURSE CONTENT	MODE OF DELIVERY	EXHIBIT/ REFERENCE
1	1	Types of estimates – Plinth area, floor area / carpet area	Lecture	Study material
2	2	Units and modes of measurements as per IS 1200. Accuracy of measurement for different item of work	Lecture	Study material
3	3	Quantity Estimate of Building Short wall long wall method and centre line method.	Lecture	Study material
4	4	Single wall detail drawing discussion Estimation of single wall	Student presentation	Study material
5	5	deductions in masonry, plastering, white washing, painting etc.,	Lecture	Study material
6	6	Model making by the students	Video content	<a href="https://youtu.be/otRqGlmCO3I">https://youtu.be/otRqGlmCO3I</a>
7	7	Double room detail drawing discussion and analysis	Video content	<a href="https://youtu.be/4x4oRRwJb3s">https://youtu.be/4x4oRRwJb3s</a>
8	8	Double room estimation. E/W excavation	Video content	<a href="https://youtu.be/4x4oRRwJb3s">https://youtu.be/4x4oRRwJb3s</a>
9	9	PCC,b/w in foundation quantity calculation.	Lecture	Study material

		B/W in superstructure,plastering quantity calculation		
10	10	Deduction for B/w and plastering calculation.	Lecture	Study material
11	11	Construction site visit		
12	12	CLASS TEST		
13	13	Introduction to multi room Detail drawing elaboration of multi room or single stored building	Lecture	Study material
14	14	Estimation of E/W excavation	Lecture	Study material
15	15	Lime concrete in foundation,b/w in foundation.	Lecture	Study material
16	16	Dpc,b/w in superstructure quantity calculation.	Student presentation	Study material
17	17	Plastering of single room building Deduction for plastering.	Lecture	Study material
18	18	Detailed estimate of single storied flat roof building with shallow foundation	Guest lecture	Study material
19	19	Quantity calculation of the items	Lecture	Study material
20	20	CLASS TEST		
21	21	Rate analysis of the estimated quantity	Lecture	Study material
22	22	RCC roof slab with leak proof treatment over it including staircase	Video content	<a href="https://youtu.be/3kx5IU3Od8A">https://youtu.be/3kx5IU3Od8A</a>
23	23	Introduction to mummy room	Lecture	Study material
24	24	Introduction to rate analysis.	Lecture	Study material
25	25	Analysis of rates for cement concrete	Lecture	Study material
26	26	Rate analysis for brick masonry in Cement Mortar	Lecture	Study material
27	27	laterite stone masonry in Cement Mortar	Lecture	Study material

28	28	Rate analysis for cement plaster,	Lecture	Study material
29	29	white washing, Artificial Stone flooring	Lecture	Study material
30	30	Rate analysis for Tile flooring	Lecture	Study material
31	31	Cost calculation for concrete flooring,	Lecture	Study material
32	32	Rate analysis for RCC with centring and shuttering	Lecture	Study material
33	33	Rate analysis for reinforcing steel	Lecture	Study material
34	34	Rate analysis for Painting of doors and windows etc. as per OPWD.	Lecture	Study material
35	35	Calculation of lead, lift,	Lecture	Study material
36	36	CLASS TEST		
37	37	conveyance charges, royalty of materials, etc. as per Orissa P.W.D. system (Concept of C.P.W.D./Railways provisions	Guest lecture	Study material
38	38	Abstract of cost of estimate.	Lecture	Study material
39	39	Valuation- Value and cost,	Lecture	Study material
40	40	scrap value, salvage value,	Lecture	Study material
41	41	assessed value, sinking fund	Lecture	Study material
42	42	depreciation and obsolesce, methods of valuation	Lecture	Study material
43	43	<b>Administrative Set-Up of Engineering Organisations:</b> Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc	Lecture	Nptel reference

44	44	Duties and responsibilities of Engineers at different positions /levels. discussion	Lecture	Study material
45	45	Duties and responsibilities of chief engineer.	Lecture	Study material
46	46	Duties of Assistant engineer.	Lecture	Study material
47	47	Duties of junior engineer.	Lecture	Study material
48	48	CLASS TEST		

Signature of Concern Teacher