

**LESSON PLAN**

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<b>Session</b>	::	Winter – 2022
<b>Course Type</b>	::	Theory
<b>Semester/Branch</b>	::	5 <sup>th</sup> Semester, civil Engineering
<b>Subject (with code)</b>	::	<b>Estimation &amp; cost evaluation-2 (Theory-5)</b>
<b>Contact hours/week</b>	::	4 hours
<b>Name of Faculty</b>	::	Ananyashree moharana

SL. No.	CLASS ID	COURSE CONTENT	MODE OF DELIVERY	EXHIBIT/ REFERENCE
1	1	Introduction to different types of culverts.	Lecture	Study material
2	2	Elaboration about slab culvert with right angled type wing wall with the help of model.	Lecture	Study material
3	3	Detailed estimate of a RCC slab culvert with right angled wing walls	Lecture	Study material
4	4	Discussion about the previous knowledge about different slabs.	Lecture	Study material
5	5	Explanation by the help of model	Lecture	
6	6	estimation of bar bending schedule for one way slab	Lecture	Study material
7	7	Introduction of two way slab with the help of detail drawing.	Video presentation	<a href="https://youtu.be/vT6JJGlrZyU">https://youtu.be/vT6JJGlrZyU</a>
8	8	Estimation of bar bending schedule for two way slab	Lecture	Study material
9	9	Construction site visit for practical knowledge.		
10	10	PRACTICE TEST		
11	11	RCC Hume pipe culvert with splayed angled wing wall detail drawing discussion and estimation.	Student presentation	Study material
12	12	<b>Estimate of irrigation structures</b>	Lecture	Study material

		Detailed drawing elaboration of simple type of vertical fall to given specification		
13	13	Site visit for the better knowledge		
14	14	Discussion about different parts of a vertical fall by the help of model	Video presentation	Nptel reference
15	15	Detail estimation of vertical fall( Earth work),cement concrete,	Lecture	Study material
16	16	Ponting	Lecture	Study material
17	17	Detailed drawing elaboration of drainage siphon from B.N dutta.	Lecture	Study material
18	18	PRACTICE TEST		
19	19	Estimation of drainage syphon. Detailed drawing elaboration of drainage siphon from M.chakraborty.	Lecture	Study material
20	20	Estimation of drainage syphonE/W,cement concrete B/W,pointing	Lecture	Study material
21	21	Detail drawing discussion of road cutting. Detailed estimate of a flexible pavement in cutting	Lecture	Study material
22	22	Detail drawing discussion of road in banking and estimation.	Lecture	Study material
23	23	PRACTICE TEST		
24	24	Introduction to water bound macadam road detail drawing discussion	Video content	<a href="https://youtu.be/m1ge8BB6RrQ">https://youtu.be/m1ge8BB6RrQ</a>
25	25	Detail estimation of water bound macadam road.	Guest Lecture	Study material
26	26	Introduction to septic tank with the help of drawing.	Video content	<a href="https://youtu.be/t37zUtDtXNo">https://youtu.be/t37zUtDtXNo</a>
27	27	Detailed estimate of septic tank and soak pit for 50 users	Lecture	Study material

28	28	Miscellaneous estimates Introduction of tube well Estimation of tube well various parts.	Lecture	Study material
29	29	pile and pile cap.detail drawing elaboration. Tube well, Piles and Pile cap	Lecture	Study material
30	30	Detail drawing elaboration of footings Isolated and combined footings	Lecture	Study material
31	31	<b>PWD account works</b> Classification of work- original, major, petty, repair work	Lecture	Study material
32	32	annual repair, special repair, quadrantal repair Concept of Method of execution of works through the contractors and department	Lecture	Study material
33	33	contract and agreement, work order, types of contract, piece work agreement	Lecture	Study material
34	34	Administrative approval, technical sanction, tender, preparation of notice inviting tender, quotations, earnest money	Lecture	Study material
35	35	E-tendering, security deposit, advance payment, intermediate payment	Lecture	Study material
36	36	final payment, running bill, final bill, regular and temporary establishment, cash	Lecture	Study material
37	37	major & subhead of account, temporary advance (imprest money),supervision charges, suspense account,	Lecture	Study material
38	38	debit, credit, book transfer, voucher and related accounts	Lecture	Nptel link
39	39	Measurement book use & maintenance, procedure of marking entries of	Lecture	Study material

		measurement of work and supply of materials		
40	40	Muster roll : Its preparation & use for making payment of pay & wages , Acquittance Roll : Its preparation & use for making payment of pay & wages	Guest lecture	Study material
41	41	Labour & labour report, method of labour payment	Lecture	Study material
42	42	use of forms and necessity of Submission, Classification of stores, receipt / issue statement on standard form	Lecture	Study material
43	43	method of preparation of stock account,	Lecture	Study material
44	44	preparation and submission of returns	Lecture	
45	45	verification of stocks, shortage and excess	Lecture	Study material
46	46	Building BYLAWS and REGULATORY Bodies	Lecture	
47	47	Development authorities, types and their levels, RERA etc.	Lecture	Study material
48	48	CLASS TEST		

Signature of Concern Teacher

**REFERENCE:**

<b>Mode of Delivery</b>	<b>Exhibit/Reference</b>
1. Lecture	1. Study material
2. Student presentation	2. YouTube Link

3. Guest Lecture	3. Nptel Reference
4. Faculty Panel Discussion	4. Personal Video Link
5. Field Visit	
6. Video Content	