



SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
LESSON PLAN
SESSION 2025-2026
DEPARTMENT OF CIVIL ENGINEERING

Discipline: Civil Engg.	Semester: 5th, Winter 2025	Name of the Teaching Faculty: Manmohan Murmu (Lecturer) Email Id:- manmohan19murmu@gmail.com
Subject: Estimation & Cost Evaluation-II, Theory-5	No. Of Days/Week: 4	Start Date: 14/12/25. End Date: 15/11/25.
Week	Class Day	Theory Topics
1st	1st	Introduction to different types of culverts.
	2nd	Elaboration about slab culvert with right angled type wing wall with the help of model.
	3rd	Detailed estimate of a RCC slab culvert with right angled wing walls
	4th	Discussion about the previous knowledge about different slabs.
2nd	1st	Explanation by the help of model
	2nd	Estimation of bar bending schedule for one way slab
	3rd	Introduction of two way slab with the help of detail drawing.
	4th	Estimation of bar bending schedule for two way slab
3rd	1st	Detail explanation and calculation for slab
	2nd	Construction site visit for practical knowledge
	3rd	RCC Hume pipe culvert with splayed angled wing wall detail drawing discussion.
	4th	Estimation of Hume pipe culvert with splayed wing wall.
4th	1st	PRACTICE TEST
	2nd	Estimate of irrigation structures Detailed drawing elaboration of simple type of vertical fall to given specification
	3rd	Discussion about different parts of a vertical fall by the help of model
	4th	Detail estimation of vertical fall(only Earth work)
5th	1st	Estimation of vertical fall(concrete in foundation/W)
	2nd	1 st class brick work in cement mortar
	3rd	Pointing work
	4th	Detailed drawing elaboration of drainage syphon from B.N dutta.
6th	1st	Estimation of drainage syphon
	2nd	QUIZ TEST
	3rd	Detailed drawing elaboration of drainage syphon from M.chakraborty.
	4th	Estimation of drainage syphon E/W, cement concrete
7th	1st	B/W, pointing
	2nd	Detailed estimate of roads Detail drawing discussion of road cutting.
	3rd	Detailed estimate of a flexible pavement in cutting
	4th	Detail drawing discussion of road in banking.
8th	1st	Detailed estimate of a flexible pavement in banking.
	2nd	Recap(doubt clearing)
	3rd	Introduction to water bound macadam road detail drawing discussion
	4th	Detail estimation of water bound macadam road.



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9 th	1st	Introduction to septic tank with the help of drawing.
	2nd	Detailed estimate of septic tank and soak pit for 50 users
	3rd	PRACTICE TEST
	4th	Miscellaneous estimates Introduction of tube well
10 th	1st	Estimation of tube well various parts.
	2nd	pile and pile cap.detail drawing elaboration.
	3rd	Tube well, Piles and Pile cap
	4th	Detail drawing elaboration of footings
11 th	1st	Isolated and combined footings
	2nd	PWD account works Classification of work-original, major, petty, repair work, , annual repair, special repair, quadrantal repair
	3rd	quiz test
	4th	Concept of Method of execution of works through the contractors and department, contract and agreement, work order
12 th	1st	Types of contract, piece work agreement
	2nd	class test
	3rd	Administrative approval, technical sanction, tender, preparation of notice inviting tender, quotations, earnest money
	4th	E-tendering, security deposit, advance payment, intermediate payment
13 th	1st	Final payment, running bill, final bill, regular and temporary establishment, cash
	2nd	Major & subhead of account, temporary advance (imprest money),supervision charges, suspense account,
	3rd	Debit, credit, book transfer, voucher and related accounts
	4th	Measurement book use & maintenance, procedure of marking entries of measurement of work and supply of materials
14 th	1st	Muster roll : Its preparation & use for making payment of pay & wages , Acquittance Roll : Its preparation & use for making payment of pay & wages
	2nd	Labour & labour report, method of labour payment
	3rd	use of forms and necessity of Submission, Classification of stores, receipt / issue statement on standard form
	4th	method of preparation of stock account, preparation and submission of returns
15 th	1st	verification of stocks, shortage and excess
	2nd	Building BYLAWS and REGULATORY Bodies
	3rd	Development authorities, types and their levels, RERA etc.
	4th	Previous year question paper discussion


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