

## NILASAILA INSTITUTE OF SCIENCE & TECHNOLOGY SERGARH-756060, BALASORE (ODISHA) (Approved by AICTE& affiliated to SCTE&VT, Odisha)



## LESSON PLAN

SUBJECT: Th-5 (ESTIMATION & COSTEVALUATION-II)

Name Of The Faculty :- Er. Kumar Swatiranjan

Branch :- Civil Engineering

Session: - 2024-25

Semester: - 5th

Examination: - 2024 (w)

## **CHAPTER WISE DISTRIBUTION OF PERIODS**

Sl.No.	Name of the chapter as per the Syllabus	No. of Periods as per the Syllabus	No. of periods actually needed
1	Detailed estimate of culverts and bridges	12	15
2	Estimate of irrigation structures	14	16
3	Detailed estimate of roads	12	15
4	Detailed estimates of miscellaneous works	12	15
5	PWD accounts works	10	14
	Total Period:	60	75

Sign of Faculty

Sign of H.O.D.

Discipline: CIVIL ENGINEERING	Semester: 5th	Name of the Teaching Faculty: Er. Kumar Swatiranjan	
		<b>SESSION</b> : 2024-25 <b>EXAMINATION</b> : 2024 (W)	
Week	Class Day	Topics to be Covered	
1100		1. Detailed estimate of culverts and bridges	
	1 <sup>st</sup>	1.Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
		handing schedule	
	2 <sup>nd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
1 <sup>st</sup>		bending schedule  1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
	3 <sup>rd</sup>	. U hadula	
	4 <sup>th</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
		to the date	
	5 <sup>th</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
		bending schedule	
- 10	1 <sup>st</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
		bending schedule	
	2 <sup>nd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
nd		bending schedule	
2 <sup>nd</sup>	3 <sup>rd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar	
	3	bending schedule	
	4 <sup>th</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	th	1.2 RCC Hume pipe culvert with splayed angled wing wall	
1000	5 <sup>th</sup>		
	1 <sup>st</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	2 <sup>nd</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
3 <sup>rd</sup>	3 <sup>rd</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
3		1.2 RCC Hume pipe culvert with splayed angled wing wall	
	4 <sup>th</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	5 <sup>th</sup>		
	1 <sup>st</sup>	Revision of 1.1 clause	
	2 <sup>nd</sup>	Revision of 1.2 clause	
4 <sup>th</sup>	- rd	2.Estimate of irrigation structures	
4	3 <sup>rd</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	
	4 <sup>th</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	
	5 <sup>th</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	
5 <sup>th</sup>	1 <sup>st</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	

Discipline: CIVIL ENGINEERING	Semester: 5th	Name of the Teaching Faculty: Er. Kumar Swatiranjan	
	311	<b>SESSION</b> : 2024-25 <b>EXAMINATION</b> : 2024 (W)	
Week	Class Day	Topics to be Covered	
	1 <sup>st</sup>	1.Detailed estimate of culverts and bridges 1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
	2 <sup>nd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
<b>1</b> <sup>st</sup>	3 <sup>rd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
	4 <sup>th</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
	5 <sup>th</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
<b>2</b> <sup>nd</sup>	1 <sup>st</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
	2 <sup>nd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
	3 <sup>rd</sup>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule	
	4 <sup>th</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	5 <sup>th</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	1 <sup>st</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	2 <sup>nd</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
3 <sup>rd</sup>	3 <sup>rd</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	4 <sup>th</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	5 <sup>th</sup>	1.2 RCC Hume pipe culvert with splayed angled wing wall	
	1 <sup>st</sup>	Revision of 1.1 clause	
4 <sup>th</sup>	2 <sup>nd</sup>	Revision of 1.2 clause	
	3 <sup>rd</sup>	2.Estimate of irrigation structures     2.1 Detailed estimate of simple type of vertical fall to given specification	
	4 <sup>th</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	
	5 <sup>th</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	
5 <sup>th</sup>	1 <sup>st</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification	

5 <sup>th</sup>	2 <sup>nd</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification
	3 <sup>rd</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification
	4 <sup>th</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification
	5 <sup>th</sup>	2.1 Detailed estimate of simple type of vertical fall to given specification
	1 <sup>st</sup>	2.2 Detailed estimate of drainage siphon to given specification.
	2 <sup>nd</sup>	2.2 Detailed estimate of drainage siphon to given specification.
6 <sup>th</sup>	3 <sup>rd</sup>	2.2 Detailed estimate of drainage siphon to given specification.
	4 <sup>th</sup>	2.2 Detailed estimate of drainage siphon to given specification.
	5 <sup>th</sup>	2.2 Detailed estimate of drainage siphon to given specification.
	1 <sup>st</sup>	2.2 Detailed estimate of drainage siphon to given specification.
	2 <sup>nd</sup>	2.2 Detailed estimate of drainage siphon to given specification.
7 <sup>th</sup>	3 <sup>rd</sup>	2.2 Detailed estimate of drainage siphon to given specification.
	4 <sup>th</sup>	Revision of 2.1 clause
	5 <sup>th</sup>	Revision of 2.2 clause
	st	3.Detailed estimate of roads
	1 <sup>st</sup>	3.1 Detail estimate of a water bound macadam road
	2 <sup>nd</sup>	3.1 Detail estimate of a water bound macadam road
8 <sup>th</sup>	3 <sup>rd</sup>	3.1 Detail estimate of a water bound macadam road
	4 <sup>th</sup>	3.1 Detail estimate of a water bound macadam road
	5 <sup>th</sup>	3.1 Detail estimate of a water bound macadam road
	1 <sup>st</sup>	3.2 Detailed estimate of a flexible pavement in cutting / filling
	2 <sup>nd</sup>	3.2 Detailed estimate of a flexible pavement in cutting / filling
9 <sup>th</sup>	3 <sup>rd</sup>	3.2 Detailed estimate of a flexible pavement in cutting / filling
	4 <sup>th</sup>	3.2 Detailed estimate of a flexible pavement in cutting / filling
	5 <sup>th</sup>	3.2 Detailed estimate of a flexible pavement in cutting / filling
	1 <sup>st</sup>	3.3 Detailed estimate of septic tank and soak pit for 50 users
<b>10</b> <sup>th</sup>	2 <sup>nd</sup>	3.3 Detailed estimate of septic tank and soak pit for 50 users
	3 <sup>rd</sup>	3.3 Detailed estimate of septic tank and soak pit for 50 users
	4 <sup>th</sup>	3.3 Detailed estimate of septic tank and soak pit for 50 users
	5 <sup>th</sup>	3.3 Detailed estimate of septic tank and soak pit for 50 users

11 <sup>th</sup>	1 <sup>st</sup>	INTERNAL ASSESMENT
	2 <sup>nd</sup>	INTERNAL ASSESMENT
	3 <sup>rd</sup>	Revision of 3.1 clause
	4 <sup>th</sup>	Revision of 3.2 clause
	5 <sup>th</sup>	Revision of 3.3 clause
12 <sup>th</sup>	1 <sup>st</sup>	4.Miscellaneous estimates 4.1 Tube well
	2 <sup>nd</sup>	4.1 Tube well
	3 <sup>rd</sup>	4.1 Tube well
	4 <sup>th</sup>	4.1 Tube well
	5 <sup>th</sup>	4.1 Tube well
13 <sup>th</sup>	1 <sup>st</sup>	4.1 Piles and Pile cap
	2 <sup>nd</sup>	4.1 Piles and Pile cap
	3 <sup>rd</sup>	4.1 Piles and Pile cap
	4 <sup>th</sup>	4.1 Piles and Pile cap
	5 <sup>th</sup>	4.1 Piles and Pile cap
	1 <sup>st</sup>	4.1 Isolated and combined footings
	2 <sup>nd</sup>	4.1 Isolated and combined footings
14 <sup>th</sup>	3 <sup>rd</sup>	4.1 Isolated and combined footings
	4 <sup>th</sup>	4.1 Isolated and combined footings
	5 <sup>th</sup>	4.1 Isolated and combined footings
	1 <sup>st</sup>	Revision of 4.1
	2 <sup>nd</sup>	Revision of 4.1
<b>15</b> <sup>th</sup>	3 <sup>rd</sup>	Revision of 4.1
	4 <sup>th</sup>	5.PWD Accounts works 5.1 Works 5.1.1 Classification of work-original, major, petty, repair work, annual repair, special repair, quadrantal repair
	5 <sup>th</sup>	5.1.2 Concept of Method of execution of works through the contractors and department, contract and agreement, work order, types of contract, piece work agreement

1 <sup>st</sup>	5.2 Accounts of works – 5.2.1 Explanation of various terms Administrative approval, technical sanction, tender, preparation of notice inviting
	tender, quotations, earnest money,
2 <sup>nd</sup>	5.2.1E-tendering, security deposit, advance payment, intermediate payment, final payment.
3 <sup>rd</sup>	5.2.1Running bill, final bill, regular and temporary establishment, cash, major & subhead of account, temporary advance (imprest money),
4 <sup>th</sup>	5.2.1 Supervision charges, suspense account, debit, credit, book transfer, voucher and related accounts .
5 <sup>th</sup>	5.2.2 Measurement book use & maintenance, procedure of marking entries of measurement of work and supply of materials, labour employed, standard measurement books and common irregularity
1 <sup>st</sup>	5.2.2 Measurement book use & maintenance, procedure of marking entries of measurement of work and supply of materials, labour employed, standard measurement books and common irregularity
2 <sup>nd</sup>	5.2.3 Muster roll : Its preparation & use for making payment of pay & wages
3 <sup>rd</sup>	5.2.4 Acquittance Roll : Its preparation & use for making payment of pay & wages
4 <sup>th</sup>	5.2.5 Labour & labour report, method of labour payment, use of forms and necessity of Submission
5 <sup>th</sup>	5.2.6 Classification of stores, receipt / issue statement on standard form, method of preparation of stock account, preparation and submission of returns, verification of stocks, shortage and excess
1 <sup>st</sup>	5.2.6 Classification of stores, receipt / issue statement on standard form, method of preparation of stock account, preparation and submission of returns, verification of stocks, shortage and excess
2 <sup>nd</sup>	5.3 Building BYLAWS and REGULATORY Bodies, Development authorities, types and their levels, RERA etc.
3 <sup>rd</sup>	Revision of 5.1
4 <sup>th</sup>	Revision of 5.2
5 <sup>th</sup>	Revision of 5.3
	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> 1 <sup>st</sup> 2 <sup>nd</sup> 4 <sup>th</sup> 4 <sup>th</sup>

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