



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



## **LESSON PLAN**

**SUBJECT: Th-5 (ESTIMATION & COST EVALUATION-II)**

### **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	12
	Total Period:	60	73

<b>Discipline:</b> CIVIL ENGINEERING	<b>Semester:</b> 5th	<b>Name of the Teaching Faculty:</b> Er. Kumar Swatiranjan
		<b>SESSION : 2023-24</b> <b>EXAMINATION : 2023(W)</b>
<b>Week</b>	<b>Class Day</b>	<b>Topics to be Covered</b>
<b>1<sup>st</sup></b>	<b>1<sup>st</sup></b>	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
	<b>2<sup>nd</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
	<b>3<sup>rd</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
	<b>4<sup>th</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
	<b>5<sup>th</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
<b>2<sup>nd</sup></b>	<b>1<sup>st</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
	<b>2<sup>nd</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
	<b>3<sup>rd</sup></b>	1.1 Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule
	<b>4<sup>th</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
	<b>5<sup>th</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
<b>3<sup>rd</sup></b>	<b>1<sup>st</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
	<b>2<sup>nd</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
	<b>3<sup>rd</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
	<b>4<sup>th</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
	<b>5<sup>th</sup></b>	1.2 RCC Hume pipe culvert with splayed angled wing wall
<b>4<sup>th</sup></b>	<b>1<sup>st</sup></b>	Revision of 1.1 clause
	<b>2<sup>nd</sup></b>	Revision of 1.2 clause
	<b>3<sup>rd</sup></b>	2.Estimate of irrigation structures 2.1 Detailed estimate of simple type of vertical fall to given specification
	<b>4<sup>th</sup></b>	2.1 Detailed estimate of simple type of vertical fall to given specification
	<b>5<sup>th</sup></b>	2.1 Detailed estimate of simple type of vertical fall to given specification
<b>5<sup>th</sup></b>	<b>1<sup>st</sup></b>	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
6 <sup>th</sup>	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.
	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.
7 <sup>th</sup>	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.
	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
8 <sup>th</sup>	1 <sup>st</sup>	3.Detailed estimate of roads 3.1 Detail estimate of a water bound macadam road
	2 <sup>nd</sup>	3.1 Detail estimate of a water bound macadam road
	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
9 <sup>th</sup>	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
	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
10 <sup>th</sup>	1 <sup>st</sup>	3.3 Detailed estimate of septic tank and soak pit for 50 users
	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

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

<b>16<sup>th</sup></b>	<b>1<sup>st</sup></b>	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,
	<b>2<sup>nd</sup></b>	5.2.1E-tendering, security deposit, advance payment, intermediate payment, final payment.
	<b>3<sup>rd</sup></b>	5.2.1Running bill, final bill, regular and temporary establishment, cash, major & subhead of account, temporary advance (imprest money),
	<b>4<sup>th</sup></b>	5.2.1 Supervision charges, suspense account, debit, credit, book transfer, voucher and related accounts .
	<b>5<sup>th</sup></b>	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
<b>17<sup>th</sup></b>	<b>1<sup>st</sup></b>	5.2.3 Muster roll : Its preparation & use for making payment of pay & wages
	<b>2<sup>nd</sup></b>	5.2.4 Acquittance Roll : Its preparation & use for making payment of pay & wages
	<b>3<sup>rd</sup></b>	5.2.5 Labour & labour report, method of labour payment, use of forms and necessity of Submission
	<b>4<sup>th</sup></b>	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
	<b>5<sup>th</sup></b>	5.3 Building BYLAWS and REGULATORY Bodies, Development authorities, types and their levels, RERA etc.