GOVERNMENT POLYTECHNIC, SAMBALPUR (RENGALI)

NAME OF THE FACULTY: Smt. Swetapadma Sahoo (Senior Lect.), Civil Enginee ring

LESSION PLAN FOR ESTIMATING AND COST EVALUATION-II FOR 5TH SEM ,CIVIL ENGG,WINTER-2021 W.E.F. 01.10.2021

WEEK NO.	DATE	TOPIC	PERIODS ASSIGNED PER TOPIC	PERIODS AVAILABLE PER WEEK
W-1	01.10.21 TO 02.10.21	1. Introduction to culvert, types of culvert, parts of a culvert & difference between culvert & bridge Detailed study of plan and sectional elevation of RCC deck slab culvert with right angled wing wall	12	4
W-2	04.10.21 TO 09.10.21	Calculation of E/W in excavation , cement concrete work in foundation & Brick work in cement mortar of RCC deck slab culvert Bar bending schedule Calculation of quantity of RCC work & reinforcement Calculation of quantity of cement concrete wearing coat &cement pointing of RCC slab culvert		4
W-3	21.10.21 TO 23.10.21	Detailed study of plan & sectional elevation of hume pipe culvert with right angled wing wall Calculation of quantity of E/W in excavation and cement concrete work in foundation of hume pipe culvert Calculation of quantity of brickwork in cement mortar of hume pipe culvert Calculation of quantity of cement pointing of hume pipe culvert Detailed study of plan & sectional elevation of a slab culvert with splayed wing wall		4
W-4	25.10.21 TO 30.10.21	2. Concept of fall, its types and necessity Study of plan& sectional elevation of a vertical fall	14	4
W-5	01.11.21 TO 06.11.21	Calculation of quantity of earthwork in excavation of vertical fall. Calculation of quantity of earth work in excavation & cement concrete work in foundation of vertical fall Calculation of quantity of brickwork in 1:4 cement mortar of vertical fall		4
W-6	08.11.21 TO 13.11.21	Calculation of quantity of brick on edge flooring & brick pitching Of fall Calculation of quantity of cement pointing in 1:3 cement mortar of fall Concept of cross drainage work, its types and introduction to drainage syphon ,Study of plan and sectional elevation of a drainage syphon Study of plan and sectional elevation of a drainage syphon		4

W-7	15.11.21 TO 20.11.21	Calculation of quantity of earthwork in excavation and cement concrete work in foundation of drainage syphon Calculation of quantity of brickwork in 1:4 cement mortar of drainage siphon Calculation of quantity of RCC work in slab, 10 cm thick brick flooring in 1:3 cement mortar & 10 cm dry brick pitching of drainage syphon Calculation of quantity of cement pointing in 1:2 cement mortar of drainage siphon		2
W-8	22.11.21 TO 27.11.21	**3.** Concept of lead and lift, derivation of formula for calculation of earthwork using different methods Problem discussion on calculation of earthwork using Mid-sectional Area method, Mean sectional Area Method and Prismoidal Formula		4
W-9	29.11.21 TO 04.12.21	Calculation of earthwork of a road in banking Calculation of earthwork of a road in banking Calculation of earthwork of a road in banking and cutting Calculation of earthwork of a road in banking and cutting Detailed estimate of a water bound macadam road Detailed estimate of a water bound macadam road, Detailed estimate of a national	12	4
W-10	06.12.21 TO 11.12.21	highway in cutting and banking Detailed estimate of septic tank and soak pit for 50 users Detailed estimate of septic tank and soak pit for 50 users Detailed estimate of septic tank and soak pit for 50 users		4
W-11	13.12.21 TO 18.12.21	**4.** Detailed estimate of Tube well(Prepare an estimate of a 40 mm dia. Tube well 40 meter deep from the given drawing) Detailed estimate of Tube well(Prepare an estimate of a 40 mm dia. Tube well 40 meter deep from the given drawing) Detailed estimate of Tube well(Prepare an estimate of a 40 mm dia. Tube well 40 meter deep from the given drawing)		4
W-12	20.12.21 TO 25.12.21	Detailed estimate of Tube well(Prepare an estimate of a 40 mm dia. Tube well 40 meter deep from the given drawing) Detailed estimate of Tube well(ESTIMATE OF 50 MM Dia. TUBE WELL WITH DEEP HAND PUMP) DISCUSSION OF CLASS TEST QUESTION AND ANSWER SHEET	12	4

W-13	27.12.21 TO 01.01.22	DISTRIBUTION Detailed estimate of Tube well(ESTIMATE OF 50 MM Dia. TUBE WELL WITH DEEP HAND PUMP) Detailed estimate of Tube well(ESTIMATE OF 50 MM Dia. TUBE WELL WITH DEEP HAND PUMP) Detailed estimate of Tube well(ESTIMATE OF 50 MM Dia. TUBE WELL WITH DEEP HAND PUMP) Detailed estimate of Piles and Pile cap Detailed estimate of Isolated and combined footings.		4
W-14 W-15	03.01.22 TO 08.01.22 & Onwards	5. Classification of work-original, major, petty, repair work, annual repair, special repair, quadrantal repair. Concept of Method of execution of works through the contractors and department, contract and agreement, work order, types of contract, piece work agreement. Explanation of various terms Administrative approval, technical sanction, tender, preparation of notice inviting tender, quotations, earnest money, E-tendering ,security deposit, advance payment, intermediate payment, final payment, running bill, final bill, regular and temporary establishment, cash, major & subhead of account, temporary advance (imprest money),supervision charges, suspense account, debit, credit, book transfer, voucher and related accounts . Measurement book use & maintenance, procedure of marking entries of measurement of work and supply of materials, labour employed, standard measurement books and common irregularity. Muster roll : Its	10	4 4 + 2EXTRA CLASS

Signature of Concerned Faculty

C/S Signature of Senior Lect./ HOD