P.C.I.E.T., CHHENDIPADA, DIST- ANGUL				
THEORY LESSON PLAN FOR THE SESSION 2022 - 23				
BRANCH : CIVIL ENGG. SEMESTER : 3RD, SECTION :- (C1 & C2)			NAME OF THE FACULTY : (1) ER. JIBAN JYOTI ROUT, (2) ER. PRITAM SAGAR SAHOO, LECT. IN CIVIL ENGG.	
SEMESTER FROM DT. 15.09.2022 TO 21.01.2023			THEORY SUBJECT : STRUCTURAL MECHANICS (TH-1)	
CLASS ALLOTTED / WEEK: 05 PERIODS				
Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**UNIT-1 Review Of Basic Concepts**	**4**		
	Basic Principle of Mechanics, Force,	1	SEPTEMBER	Dt. 15.09.2022 , Dt. 16.09.2022
	Moment	1		Dt. 19.09.2022
	Support conditions,Conditions of equilibrium	1		Dt. 20.09.2022
	C.G & MI, Free body diagram ,CG and MI of different sections	1		Dt. 21.09.2022
2	**UNIT-2.1 Simple And Complex Stress, Strain**	**15**		
	Introduction to stresses and strains	1		Dt. 22.09.2022
	Mechanical properties of materials – Rigidity, Elasticity, Plasticity, Compressibility, Hardness, Toughness, Stiffness, Brittleness, Ductility, Malleability, Creep, Fatigue, Tenacity, Durability	1		Dt. 23.09.2022 , Dt. 26.09.2022
	Types of stresses -Tensile, Compressive and Shear stresses	1		Dt. 27.09.2022
	Types of strains - Tensile, Compressive and Shear strains	1		Dt. 28.09.2022
	Complimentary shear stress - Diagonal tensile / compressive Stresses due to shear	1		Dt. 29.09.2022
	Elongation and Contraction, Longitudinal and Lateral strains	1		Dt. 30.09.2022
	Poisson's Ratio, Volumetric strain, computation of stress, strain, Poisson's ratio, change in dimensions and volume	1	OCTOBER	Dt. 10.10.2022
	Hooke's law - Elastic Constants, Derivation of relationship between the elastic constants	1		Dt. 11.10.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	UNIT-2.2 Application of simple stress and strain in engineering field:			
	Behaviour of ductile and brittle materials under direct loads, Stress Strain curve of a ductile material, Limit of proportionality, Elastic limit, Yield stress,	1		Dt. 12.10.2022 , Dt. 13.10. 2022
	Ultimate stress, Breaking stress, Percentage elongation, Percentage reduction in area, Significance of percentage elongation and reduction in area of cross section	1		Dt. 14.10. 2022 , Dt. 17.10.2022
	Deformation of prismatic bars due to uniaxial load, Deformation of prismatic bars due to its self weight			Dt. 18.10.2022, Dt. 19.10. 2022
	UNIT-2.3 Complex Stress and Strain			
	Principal stresses and strains: Occurrence of normal and tangential stresses	1		Dt. 20.10.2022 , Dt. 21.10.2022
	Concept of Principal stress and Principal Planes, major and minor principal stresses	1		Dt. 26.10. 2022
	major and minor principal stresses major and minor principal stresses and their orientations	1		Dt. 27. 10. 2022
	Mohr's Circle and its application to solve problems of complex stresses	2		Dt. 28. 10. 2022 , Dt. 31.10.2022
3	**UNIT-3.1 Stresses In Beams and Shaft**	**10**		
	Stresses in beams due to bending: Bending stress in beams –	1	NOVEMBER	Dt. 01. 11. 2022
	Theory of simple bending – Assumptions	1		Dt. 02. 11. 2022
	Moment of resistance – Equation for Flexure– Flexural stress distribution	1		Dt. 03. 11. 2022
	Curvature of beam – Position of N.A. and Centroidal Axis – Flexural rigidity – Significance of Section modulus	1		Dt. 04. 11. 2022
	UNIT-3.2 Shear Stresses in Beams	1		Dt. 07. 11. 2022
	Shear stress distribution in beams of rectangular section,circular and standard sections symmetrical about vertical axis	1		Dt. 08. 11. 2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	UNIT-3.3 Stresses in Shafts due to Torsion			
	Concept of torsion, basic assumptions of pure torsion	1		Dt. 09.11.2022
	Torsion of solid and hollow circular sections, polar moment of inertia	1		Dt. 10.11.2022
	Torsional shearing stresses, angle of twist, torsional rigidity, equation of torsion			Dt. 11.11.2022
	UNIT-3.4 Combined \Bending and Direct Stresses			
	Combined bending and direct stresses:Combination of stresses, Combined direct and bending stresses, Maximum and Minimum stresses in Sections	1		Dt. 14.11.2022 , Dt. 15.11.2022
	Conditions for no tension, Limit of eccentricity, Middle third/fourth rule, Core or Kern for square, rectangular and circular sections, chimneys, dams and retaining walls	1		Dt. 15.11.2022 , Dt. 16.11.2022
4	**UNIT-4 Columns and Struts**	4		
	Columns and Struts, Definition, Short and Long columns	1		Dt. 17.11.2022
	End conditions, Equivalent length / Effective length, Slenderness ratio	1		Dt. 18.11.2022
	Axially loaded short and long column, Euler's theory of long columns	1		Dt. 21.11.2022
	Critical load for Columns with different end conditions(numericals)	1		Dt. 22.11.2022
5	**UNIT-5.1,Shear Force and Bending Moment**	12		
	Types of Loads: Concentrated (or) Point load, Uniformly Distributed load (UDL),	1		Dt. 23.11.2022 , Dt. 24.11.2022
	Types of Supports: Simple support, Roller support, Hinged support, Fixed support,	1		Dt. 25.11.2022
	Types of Reactions: Vertical reaction, Horizontal reaction, Moment reaction	1		Dt. 28.11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Types of Beams based on support conditions: Calculation of support reactions using equations of static equilibrium.	1		Dt. 29.11.2022
	UNIT-5.2 Shear Force and Bending Moment in Beams			
	Shear Force and Bending Moment	1		Dt. 30.11.2022
	Signs Convention for S.F. and B.M, S.F and B.M of general cases of determinate beams with concentrated loads and udl only,	1	DECEMBER	Dt. 01.12.2022
	S.F and B.M diagrams for Cantilevers	1		Dt. 02.12.2022
	Simply supported beams and Over hanging beams	1		Dt. 03.12.2022
	Position ofmaximum BM	1		Dt. 05.12.2022
	Point of contra flexure, Relation between intensity of load, S.F and B.M.(numericals)	1		Dt. 07.12.2022
	Numericals on shear force and bending moment of simply supported beam	1		Dt. 08.12.2022
	Numericals on shear force and bending moment of simply supported beam	1		Dt 09.12.2022
6	**UNIT-6.1Slope and Deflection**	**10**		
	Shape and nature of elastic curve (deflection curve);	1		Dt. 10.12.2022
	Relationship between slope, deflection and curvature (No derivation)	1		Dt. 12.12.2022
	Importance of slope and deflection.	1		Dt. 14.12.2022
	Slope and deflection of cantilever beam under point load	1		Dt. 15.12.2022
	Slope and deflection of simply supported beams under concentrated load	1		Dt. 16.12.2022
	Slope and deflection of cantilever beam under u.d.l	1		Dt. 17.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Slope and deflection of simply supported beams under u.d.l	1		Dt. 19.12.2022
	Slope and deflection of cantilever by Double Integration method,	1		Dt. 21.12.2022
	Slope and deflection of cantilever byMacaulay's method	1		Dt. 22.12.2022
	Slope and deflection of simply supported beams under different load condition by maculay's method	1		Dt. 23.12.2022
7	**UNIT-7 Indeterminate Beams**	**10**		
	Indeterminacy in beams, Principle of consistent deformation/compatibility,	1		Dt. 24.12.2022
	Analysis of propped cantilever, fixed and two span continuous beams by principle of superposition Indeterminacy in beams, Principle of consistent deformation/compatibility,	1		Dt. 26.12.2022, Dt. 28.12.2022
	SF and BM diagrams (point load and udl covering full span)	1		Dt. 29.12.2022
	Numericals on shear force and bending moment diagram propped cantilever beam	1		Dt. 30.12.2022
	Numericals on shear force and bending moment diagram fixed beam	1		Dt. 31.12.2022
	Numericals on shear force and bending moment diagram fixed beam	1	JANUARY	Dt. 02.01.2023
	Numericals on shear force and bending moment diagram fixed beam	1		Dt. 02.01.2023, Dt. 04.01.2023
	Numericals on shear force and bending moment diagram propped cantilever beam	1		Dt. 05.01.2023
	Numericals on shear force and bending moment diagram of continuous beam	1		Dt. 06.01.2023
	Numericals on shear force and bending moment diagram of continuous beam	1		Dt. 07.01.2023

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
8	**Trusses**	**10**		
	Types of trusses, statically determinate and indeterminate trusses,	1		Dt.09.01.2023
	degree of indeterminacy, stable and unstable trusses, advantages of trusses.	1		Dt.11.01.2023
	Analysis of trusses: Analytical method (Method of joints, method of Section)	1		Dt.12.01.2023
	Numericals on method of joints of truss	1		Dt.13.01.2023
	Numericals on method of joints of truss	1		Dt.16.01.2023
	Numericals on method of joints of truss	1		Dt.18.01.2023
	Numericals on method of joints of truss	1		Dt.19.01.2023
	Numericals on method of section of truss	1		Dt.19.01.2023
	Numericals on method of section of truss	1		Dt.20.01.2023
	Numericals on method of section of truss	1		Dt.21.01.2023

jjRout Pritam S. Sahoo

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THEORY LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH : CIVIL ENGG. SEMESTER : 3RD, SECTION : (C1&C2)

NAME OF THE FACULTY : (1) ER. SIBANI SAHU
(2) ER. NANDINI PRADHAN (LECT. IN CIVIL ENGG.)

SEMESTER FROM DT. 15.09.2022 TO 21.01.2023

THEORY SUBJECT : GEOTECHNICAL ENGINEERING (TH-2)

CLASS ALLOTTED / WEEK: 05 PERIODS

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**UNIT-1 : INTRODUCTION**	**2**		
	Soil and Soil Engineering ,Scope of Soil Mechanics	1	SEPT	Dt. 15.09.2022
	Origin and formation of soil	1		Dt. 16.09.2022
2	**UNIT-2 : PRELIMINARY DEFINATIONS AND RELATIONSHIP**	**6**		
	Soil as a three Phase system	1		Dt- 19.09.2022
	Water Content, Density, Specific gravity, Voids ratio, Porosity, Percentage of air voids, air content, degree of saturation, density Index	1		Dt. 20.09.2022
	Degree of saturation, density Index, Bulk/Saturated/dry/submerged density, Interrelationship of various soil parameters	1		Dt. 22.09.2022
	Interrelationship of various soil parameters	1		Dt 23.09.2022. Dt - 26.09.2022
	Problems discussion on soil parameters and their relationships	1		Dt. 27.09.2022
	Problems discussion on soil parameters and their relationships	1		Dt. 29.09.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
3	**UNIT-3 INDEX PROPERTIES OF SOIL**	**4**		
	Water Content , Specific Gravity	1		Dt - 30.09.2022
	Particle size distribution: Sieve analysis, wet mechanical analysis,	1	OCT	Dt - 10.10.2022
	Particle size distribution curve and its uses	1		Dt - 11.10.2022
	Consistency of Soils, Atterberg's Limits, Plasticity Index, Consistency Index, Liquidity Index	1		Dt - 13.10.2022. Dt - 14.10.2022
4	**UNIT-4: CLASSIFICATION OF SOIL**	**6**		
	Particle size classification system	1		Dt - 17.10.2022
	Highway research board classification system	1		Dt - 18.10.2022
	Unified soil classification system	1		Dt - 20.10.2022
	Indian standard soil classification system	1		Dt - 21.10.2022
	Plasticity chart	1		Dt - 27.10.2022
	Revision	1		Dt - 28.10.2022
5	**UNIT-5 : PERMEABILITY AND SEEPAGE**	**7**		
	Concept of Permeability, Darcy's Law, Co-efficient of Permeability	1		Dt - 31.10.2022
	Factors affecting Permeability	1	NOV	Dt - 01.11.2022
	Constant head permeability and falling head permeability Test	1		Dt - 03.11.2022. Dt.04.11.2022
	Seepage pressure, effective stress, phenomenon of quick sand	1		Dt - 07.11.2022
	effective stress, phenomenon of quick sand	1		Dt - 10.11.2022
	Problem based on effective stress	1		Dt - 11.11.2022
	Problem based on effective stress	1		Dt - 14.11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
6	**UNIT-6 : COMPACTION AND CONSOLIDATION**	**8**		
	Compaction: Compaction, Light and heavy compaction Test	1		Dt - 15.11.2022
	Optimum Moisture content,Maximum dry density	1		Dt - 17.11.2022
	Zero air void line, Factors affecting Compaction	1		Dt - 18.11.2022
	Field compaction methods and their suitabilit	1		Dt - 21.11.2022
	Consolidation, distinction between compaction and consolidation.	1		Dt - 22.11.2022. Dt - 24.11.2022
	Terzaghi's model analogy of compression/ springs showing the process of consolidation	1		Dt - 25.11.2022 Dt. 28.11.2022
	Field implications	1		Dt. 29.11.2022
	Revision and discussion	1	DEC	Dt. 01.12.2022
7	**UNIT-7 :SHEAR STRENGTH**	**6**		
	Concept of shear strength, Mohr- Coulomb failure theory	1		Dt - 02.12.2022
	Cohesion, Angle of internal friction, strength envelope for different type of soil,	1		Dt - 05,12,2022
	Measurement of shear strength;- Direct shear test, triaxial shear test,	1		Dt - 06.12.2022
	unconfined compression test and vane-shear test	1		Dt - 08.12.2022
	Problems based shear strength	1		Dt - 09.12.2022
	Revision and discussion	1		Dt - 12.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
8	**UNIT-8 :EARTH PRESSURE AND RETAINING STRUCTURE**	**7**		
	Active earth pressure, Passive earth pressure,	1		Dt - 13.12.2022
	Earth pressure at rest.	1		Dt - 15.12.2022
	Use of Rankine's formula for the following cases (cohesion-less soil only) (i) Backfill with no surcharge,	1		Dt - 16.12.2022
	Use of Rankine's formula for the following cases (cohesion-less soil only) ii) backfill with uniform surcharge	1		Dt - 19.12.2022
	Problem based on earth pressure	1		Dt - 20.12.2022
	Problem based on earth pressure	1		Dt - 22.12.2022
	Revision and class test	1		Dt - 23.12.2022
9	**UNIT-9 : Foundation Engineering**	**13**		
	Introduction to foundation engineering	1		Dt - 26.12.2022
	Functions of foundations,	1		Dt - 27.12.2022
	Different types of foundations:shallow and deep	1		Dt - 29.12.2022
	Different type of shallow and deep foundations with sketches.	1		Dt - 30.12.2022 ,
	Types of failure (General shear, Local shear & punching shear),	1	JAN	Dt - 02.01.2023 , Dt - 03-01-2023
	Bearing capacity of soil	1		Dt - 05.01.2023
	Bearing capacity of soils using Terzaghi's formulae	1		Dt - 06.01.2023

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Problems based on bearing strength using terzaghi formula	1		Dt. 09.01.2023, Dt-10.01.2023
	IS Code formulae for strip, Circular and square footings	1		Dt. 12.01.2023
	Problems based on bearing strength based on IS CODE formula	1		Dt.13.01.2023, Dt-16.01.2023
	Effect water table on bearing capacity of soil	1		Dt - 17.01.2023
	Revision	1		Dt. 19.01.2023
	Class test	1		Dt. 20.01.2023

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THEORY LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH : CIVIL ENGG. SEMESTER : 3RD, SECTION : (C1 & C2)	NAME OF THE FACULTY : (1) ER. BABITA SAHU (H.O.D. IN CIVIL ENGG.), (2) ER. SUJATA DALEI, (LECT. IN CIVIL ENGG.)
SEMESTER FROM DT. 15.09.2022 TO 21.01.2023	THEORY SUBJECT : BUILDING MATERIALS & CONSTRUCTION TECHNOLOGY (TH-3)
CLASS ALLOTTED / WEEK: 04 PERIODS	

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**(PART -A)UNIT-1 : STONE**	**5**		
	Introduction,classification of rock	1	SEPTEMBER	Dt. 16.09.2022 , Dt. 17.09.2022
	uses of stone, natural bed of stone	1		Dt. 19.09.2022 , Dt. 20.09.2022
	Qualities of good building stone	1		Dt. 21.09.2022
	Dressing of stone	1		Dt. 23.09.2022
	Characteristics of different types of stone and their uses	1		Dt. 24.09.2022 , Dt. 26.09.2022
2	**UNIT-2 :Bricks**	**6**		
	Brick earth – its composition	1		Dt. 27.09.2022
	Brick making – Preparation of brick earth, Moulding, Drying,	1		Dt. 28.09.2022
	Burning in kilns (continuous Process)	1	OCTOBER	Dt. 30.09.2022 , Dt. 01.10.2022
	Classification of bricks	1		Dt. 10.10.2022
	Size of traditional and modular bricks	1		Dt. 11.10.2022
	Qualities of good building bricks	1		Dt. 12.10.2022
3	**UNIT-3 : Cement, Mortar and Concrete**	**7**		Dt. 14.10.2022
	Cement: Types of cements, Properties of cements, Manufacturing of cement	1		Dt. 15.10.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Importance and application of blended cement with fly ash and blast furnace slag	1		Dt. 17.10.2022, Dt. 18.10.2022
	Mortar: Definition and types of mortar	1		Dt. 19.10.2022
	Sources and classification of sand, Bulking of sand	1		Dt. 21.10.2022
	Use of gravel, morrum and fly ash as different building material	1		Dt. 22.10.2022
	Concrete: Definition and composition- Water cement ratio- Workability, mechanical properties of aggregate	1		Dt. 26.10.2022
	Grading of aggregates, mixing, placing, compacting and curing of concrete	1		Dt. 28.10.2022, Dt. 29.10.2022
4	**UNIT-4 :Other Construction Materials**	**7**		
	Timber: Classification and Structure of timber	1		Dt. 31.10.2022
	Seasoning of timber – Importance	1		Dt. 01.11.2022
	Characteristics of good timber	1		Dt. 02.11.2022
	Clay products and refractory materials – Definition and Classification	1		Dt. 04.11.2022
	Properties and uses of refractory materials- tiles, terracotta, porcelain glazing	1		Dt. 05.11.2022
	Iron and Steel: Uses of cast iron, wrought iron, mild steel and tor steel	1		Dt. 07.11.2022
	Revision and class test	1		Dt. 08.11.2022
5	**UNIT-5 :Surface Protective Materials**	**5**		
	Composition of Paints, enamels, varnishes	1		Dt. 09.11.2022, Dt. 11.11.2022
	Types and uses of surface protective materials like Paints, Enamels	1		Dt. 12.11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Types of Varnishes, Distempers, Emulsion, French polish and Wax Polish.	1		Dt. 14.11.2022, Dt. 15.11.2022
	Uses of Varnishes, Distempers, Emulsion, French polish and Wax Polish.	1		Dt. 16.11.2022
	Class test and revision	1		Dt. 18.11.2022
6	**(PART-B) UNIT-1 :Introduction**	**2**		
	Buildings and classification of buildings based on occupancy	1		Dt. 19.11.2022
	Different components of a building. Site investigation – objectives, site reconnaissance and explorations	1		Dt. 21.11.2022
7	**UNIT-2 :Foundations**	**4**		
	Concept of foundation and its purpose,Types of foundations – shallow and deep	1		Dt. 22.11.2022
	Shallow foundation-constructional details of : Spread foundations for walls, thumb rules for depth and width of foundation and thickness of concrete block	1		Dt. 23.11.2022, Dt. 25.11.2022
	Deep foundations: Pile foundations-their suitability	1		Dt. 26.11.2022
	Classification of piles based on materials, function and method of installation	1		Dt. 28.11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
8	**UNIT-3: Walls & Masonry Works :**	6		
	Purpose of walls Classification of walls – load bearing, non-load bearing walls, retaining walls	1		Dt. 29.11.2022, Dt. 30.11.2022
	Classification of walls as per materials of construction: brick, stone, reinforced brick, reinforced concrete, precast, hollow and solid concrete block and composite masonry walls	1	DECEMBER	Dt. 02.12.2022
	Partition Walls : Suitability and uses of brick and wooden partition walls, Brick masonry : Definition of different terms	1		Dt. 03.12.2022
	Bond – meaning and necessity: English bond for 1and 1-1/2 Brick thick walls. T, X and right angled corner junctions. Thickness for 1and 1-1/2 brick square pillars in English bond	1		Dt. 05.12.2022, Dt. 06.12.2022
	Stone Masonry :Glossary of terms –String course, corbel, cornice, block-in-course, grouting	1		Dt. 07.12.2022
	mouldings, templates, throating, through stones, parapet, coping, pilaster and buttress	1		Dt. 09.12.2022
9	**UNIT-4 :Doors, Windows And Lintels**	4		
	Glossary of terms used in doors and windows	1		Dt. 10.12.2022
	Doors – different types of doors	1		Dt. 12.12.2022
	Windows – different types of windows	1		Dt. 13.12.2022
	Purpose of use of arches and lintels	1		Dt. 14.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
10	**UNIT-5 :Floors, Roofs and Stairs**	5		
	Floors: Glossary of terms ,Types of floor finishes – cast-in-situ, concrete flooring(monolithic, bonded), terrazzo tile flooring, cast in situ Terrazzo flooring, timber flooring	1		Dt·16.12.2022, Dt. 17.12.2022
	Roofs: Glossary of terms, Types of roofs, concept and function of flat, pitched, hipped and Sloped roof	1		Dt. 19.12.2022
	Stairs: Glossary of terms; Stair case, winder, landing, stringer, newel, baluster, rise, tread, width of stair case, hand rail, nosing, head room, mumty room.	1		Dt. 20.12.2022
	Various types of stair case – straight flight, dog legged, open well, quarter turn, half turn (newel and geometrical stairs), bifurcated stair, spiral stair, cantilever stair, tread riser stair.	1		Dt. 21.12.2022 , Dt. 23.12.2022
	Revision	1		Dt. 24.12.2022
11	**UNIT-6 :Protective, Decorative Finishes, Damp and Termite Proofing**	5		
	Plastering – purpose – Types of plastering, Types of plaster finishes – Grit finish, rough cast, smooth cast, sand faced, pebble dash, acoustic plastering and plain plaster	1		Dt. 26.12.2022
	Proportion of mortars used for different plasters, preparation of mortars, techniques of plastering and curing Pointing – purpose –Types of pointing	1		Dt. 27.12.2022
	Painting – objectives – method of painting new and old wall surfaces, wood surface and metal surfaces – powder coating and spray painting on metal surfaces.	1		Dt. 28.12.2022 , Dt. 30.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	White washing – Colour washing – Distempering – internal and external walls	1	JANUARY	Dt. 31.12.2022 , Dt. 02.01.2023
	Damp and Termite proofing – Materials and Methods.	1		Dt. 03.01.2023, Dt. 04.01.2023
12	**UNIT-7 :Green Buildings, Energy Management and Energy Audit Of Buildings & Project**	4		
	Concept of green building	1		Dt. 06.01.2023 , Dt. 07.01.2023
	Introduction to Energy Management and Energy Audit of Buildings.	1		Dt. 09.01.2023, Dt. 10.01.2023 Dt. 11.01.2023
	Aims of energy management of buildings. Types of energy audit	1		Dt. 13.01.2023, Dt. 16.01.2023 Dt. 17.01.2023
	Response energy audit questionnaire Energy surveying and audit report.	1		Dt. 18.01.2023, Dt. 20.01.2023 Dt. 21.01.2023

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THEORY LESSON PLAN FOR THE SESSION 2022 - 23				
BRANCH : CIVIL ENGG. SEMESTER : 3RD SECTION : (C1 & C2)			NAME OF THE FACULTY : (1) ER. SUMANTA KUMAR SAHOO, (2) ER. SWARNAPRAVA PARIDA (LECT. IN CIVIL ENGG.)	
SEMESTER FROM DT. 15.09.2022 TO 21.01.2023		THEORY SUBJECT : ESTIMATION & COST EVALUATION-I (TH-4)		
CLASS ALLOTTED / WEEK: 04 PERIODS				
Sl. No.	**CHAPTERS TO BE COVERED**	**NO OF PERIODS AS PER ACADEMIC CALENDAR**	**MONTH**	**ACTUAL PROGRESS OF THE COURSES MADE**
1	**UNIT-1 : INTRODUCTION**	**2**		
	Types of estimates – Plinth area, floor area / carpet area	1	SEPTEMBER	Dt. 15.09.2022
	Units and modes of measurements as per IS 1200, Accuracy of measurement for different item of work	1		Dt - 19.09.2022
2	**UNIT-2 : QUANTITY OF BUILDING ESTIMATE**	**30**		
	Introduction to Building estimate methods	1		Dt - 20.09.2022
	Different types of Building Estimate methods	1		Dt . 21.09.2022
	Discussion on Long wall & Short wall method	1		Dt. 22.09.2022
	Calculation of length of long wall centre to centre & length of short wall centre to centre	1		Dt. 26.09.2022
	Discussion on Centre line method	1		Dt . 27.09.2022
	Deductions in masonry, plastering with examples	1		Dt . 28.09.2022
	Deductions in white washing, painting with examples	1		Dt . 29.09.2022
	Different types of Multiplying factors (paint coefficients) for painting of doors	1	OCTOBER	Dt . 10.10.2022
	Multiplying factors (paint coefficients) for painting of windows	1		Dt. 11.10.2022
	Problmes based on calculation of quantities of a wall & its detailed measurement	1		Dt . 12.10.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Estimate the quantities of brickwork required in a given wall dimensions	1		Dt. 13.10.2022
	Estimate the quantities of brickwork & plastering required in a given wall dimensions using long wall & short wall method	1		Dt. 17.10.2022
	Discussion on Abstarct Estimate Cost	1		Dt. 18.10.2022
	Detailed Estimate the quantities of a Single room Building (i) Earthwork in excavation in foundation (ii) Concrete in Foundation (using long wall & short wall method)	1		Dt-19.10.2022, Dt-20.10.2022
	Detailed Estimate the quantities of a Single room Building (iii) Brickwork in Foundation & plinth (iv) Brickwork in Superstucture (using long wall & short wall method)	1		Dt-26.10.2022, Dt. 27.10.2022
	Detailed Estimate of a Two roomed Building of quantities (i) Earthwork in excavation in foundation (ii) Concrete in Foundation (using long wall & short wall method)	1		Dt-31.10.2022
	Detailed Estimate of a Two roomed Building (iii) Brickwork in Foundation & plinth (iv) Brickwork in Superstucture (v) Damp proof Course with deductions (using long wall & short wall method)	1	NOVEMBER	Dt - 01.11.2022
	Analysis of a Residential Building	1		Dt - 02.11.2022
	Detailed Estimate of a Residential Building of quantities (i) Earthwork in excavation in foundation (ii) Concrete in Foundation (using long wall & short wall method)	1		Dt - 03.11.2022
	Detailed Estimate of a Residential Building of quantities (iii) Brickwork in Foundation & plinth (iv) Brickwork in Superstucture (v) Damp proof Course with deductions (using long wall & short wall method)	1		Dt. 07.11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Detailed Estimate the quantities of a Single room Building (i) Earthwork in excavation in foundation (ii) Concrete in Foundation (using Centre line method)	1		Dt - 09.11.2022
	Detailed Estimate the quantities of a Single room Building (iii) Brickwork in Foundation & plinth (iv) Brickwork in Superstucture (using Centre line method)	1		Dt. 10.11.2022
	Detailed Estimate of a Two roomed Building of quantities (i) Earthwork in excavation in foundation (ii) Concrete in Foundation (using Centre method)	1		Dt. 14.11.2022
	Detailed Estimate the quantities of aTwo roomed Building (iii) Brickwork in Foundation & plinth (iv) Brickwork in Superstucture (using Centre line method)	1		Dt. 15.11.2022
	Detailed Estimate of a Residential Building of quantities (i) Earthwork in excavation in foundation (ii) Concrete in Foundation (using Centre line method)	1		Dt - 16.11.2022, Dt.17.11.2022
	Detailed Estimate of a Residential Building of quantities (iii) Brickwork in Foundation & plinth (iv) Brickwork in Superstucture (v) Damp proof Course with deductions (using centre line method)	1		Dt - 21.11.2022
	Detailed estimate of single storied flat roof building with shallow foundation	1		Dt. 22.11.2022
	Detailed estimate of single storied flat roof building with shallow foundation	1		Dt. 23.11.2022
	Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.	1		Dt - 24.11.2022, Dt -28,11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Detailed estimate of single storied flat roof building with shallow foundation and RCC roof slab with leak proof treatment over it including staircase and mumty room.	1		Dt - 29.11.2022
	Revision	1		Dt. 30.11.2022
3	**UNIT-3:ANALYSIS OF RATES AND EVALUATION**	**22**		
	Introduction to analysis of rates and valuation	1	DECEMBER	Dt - 01.12.2022
	Analysis of rates for cement concrete, brick masonry in Cement Mortar	1		Dt. 05.12.2022
	Analysis of rates for laterite stone masonry in Cement Mortar, cement plaster	1		Dt. 06.12.2022
	Analysis of rates for white washing, Artificial Stone flooring	1		Dt - 07.12.2022
	Analysis of rates for Tile flooring, concrete flooring, R.C.C. with centering and shuttering	1		Dt. 08.12.2022
	Analysis of rates for reinforcing steel, Painting of doors and windows etc. as per OPWD.	1		Dt - 12.12.2022
	Calculation of lead, lift, conveyance charges, royalty of materials, etc. as per Orissa P.W.D. system	1		Dt - 13.12.2022 , Dt - 14.12.2022
	Discussion on Abstract of cost of estimate.	1		Dt. 15.12.2022
	Introduction to Valuation, Value and cost	1		Dt. 19.12.2022
	Discussion on scrap value, salvage value	1		Dt. 20.12.2022
	Discussion on assessed value, sinking fund	1		Dt. 21.12.2022
	Problems discussion regarding Sinking fund	1		Dt. 22.12.2022
	Discussion on depreciation and obsolesce	1		Dt - 26.12.2022
	Problems based on depreciation	1		Dt. 27.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Discussion on various methods of calculation depreciation.(i) straight line methood	1		Dt -28.12.2022
	(ii) Constant percentge method (iii) Sinking fund method	1		Dt.29.12.2022
	(iv) Quantity survey methods with problems.	1		Dt.02.01.2023
	Problems discussion on different methods of depreciation.	1		Dt-03.01.2023
	Discussion on various methods of valuation of	1		Dt. 04.01.2023
	Problems based on valuation	1		Dt. 05.01.2023
	Revision	1		Dt.09.01.2023
	Class Test - I	1		Dt. 10.01.2023
4	**UNIT-4 : ADMINISTRATIV E SET-UP OF ENGINEERING ORGANISATIONS**	**6**		
	Introduction to Administrative Set-Up of Engineering Organisations	1		Dt. 11.01.2023
	Hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors	1		Dt.12.01.2023
	Duties and responsibilities of Engineers at different positions /levels	1		Dt.16.01.2023
	Duties and responsibilities of Engineers at different positions /levels	1		Dt-17.01.2023
	Revision	1		Dt-18.01.2023
	Class Test - II	1		Dt-19.01.2023

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THEORY LESSON PLAN FOR THE SESSION 2022 - 23				
BRANCH : CIVIL ENGG. SEMESTER : 3RD SECTION : (C1 & C2)			NAME OF THE FACULTY : (1) ER. NANDINI PRADHAN, (LECT. IN CIVIL ENGG.), (2) NIRUPAMA BEHERA (LECT. IN CHEMISTRY)	
SEMESTER FROM DT. 15.09.2022 TO 21.01.2023			THEORY SUBJECT : ENVIRONMENTAL STUDIES (TH-5)	
CLASS ALLOTTED / WEEK: 05 PERIODS				
Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	**UNIT 1: THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES**	**4**		
	Definition	1	SEPTEMBER	Dt. 15.09.2022
	Scope of Environment	1		Dt. 16.09.2022
	Importance of Environment	1		Dt. 20.09.2022
	Need for public awareness	1		Dt. 21.09.2022
2	**UNIT 2 : NATURAL RESOURCES**	**10**		
	Renewable and non renewable resources	1		Dt. 22.09.2022
	Natural resources and associated problems	1		Dt. 23.09.2022
	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribalpeople	1		Dt. 27.09.2022, Dt. 28.09.2022
	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems	1		Dt-29.09.2022
	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineralresources.	1		Dt. 30.09.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,.	1	OCTOBER	Dt. 11.10.2022, Dt. 12.10.2022
	Energy Resources: Growing energy need, renewable and non renewable energy sources, use of alternate energy sources, case studies.	1		Dt. 13.10.2022
	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, anddesertification.	1		Dt. 14.10.2022
	Role of individual in conservation of natural resources.	1		Dt. 18.10.2022
	Equitable use of resources for sustainable life styles.	1		Dt. 19.10.2022
	Revision	1		Dt. 20.10.2022
	UNIT 3 : SYSTEMS	**8**		
	Concept of an eco system.Structure and function of an eco system	1		Dt. 21.10.2022
	Producers, consumers,decomposers	1		Dt. 26.10.2022
3	Energy flow in the eco systems	1		Dt. 27.10.2022
	Ecological succession	1		Dt. 28.10.2022
	Food chains, food webs and ecological pyramids	1	NOVEMBER	Dt. 01.11.2022
	Introduction, types, characteristic features	1		Dt. 02.11.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	structure and function of the Forest ecosystem	1		Dt. 03.11.2022
	structure and function of the Aquatic eco systems (ponds, streams, lakes,rivers, oceans, estuaries).	1		Dt. 04.11.2022, Dt. 09.11.2022
4	**UNIT 4 : BIODIVERSITY AND ITS CONSERVATION**	8		Dt. 10.11.2022
	Introduction-Definition: genetics, species and ecosystem diversity	1		Dt. 11.11.2022
	Biogeographically classification of India	1		Dt. 15.11.2022
	Value of biodiversity: consumptive use	1		Dt. 16.11.2022
	Productive use, social , ethical, aesthetic and optinvalues	1		Dt. 17.11.2022, Dt. 18.11.2022
	Biodiversity at global, national and local level	1		Dt. 22.11.2022
	Threats to biodiversity: Habitats loss, poaching of wild life	1		Dt. 23.11.2022
	Man wildlife conflicts	1		Dt. 24.11.2022
	Class test	1		Dt. 25.11.2022
5	**UNIT 5 : ENVIRONMENTAL POLLUATION**	12		
	Definition Causes, effects and control measures of:Air pollution	1		Dt. 29.11.2022
	Water pollution	1		Dt. 30.11.2022
	Soil pollution	1	DECEMBER	Dt. 01.12.2022
	Marine pollution	1		Dt. 02.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Noise pollution	1		Dt - 06.12.2022
	Thermal pollution	1		Dt. 07.12.2022
	Nuclear hazards	1		Dt. 08.12.2022
	Solid waste Management	1		Dt. 09.12.2022,
	Causes, effects and control measures of urban and industrial wastes.	1		Dt. 13.12.2022, Dt. 14.12.2022
	Role of an individual in prevention of pollution	1		Dt. 15.12.2022
	Disaster management: Floods, earth quake			Dt. 16.12.2022, Dt. 20-12-2022
	Cyclone and landslides.	1		Dt. 21.12.2022
6	**UNIT 6 : SOCIAL ISSUES AND THE ENVIRONMENT**	**10**		
	Form unsustainable to sustainable development	1		Dt. 22.12.2022
	Urban problems related to energy	1		Dt. 23.12.2022
	Water conservation, rain water harvesting, water shed management	1		Dt. 27.12.2022
	Resettlement and rehabilitation of people; its problems and concern.	1		Dt. 28.12.2022
	Environmental ethics: issue and possible solutions.	1		Dt. 29.12.2022
	Climatechange, globalwarming,acidrain,ozonelayerdepletion	1		Dt. 30.12.2022

Sl. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Nuclear accidents and holocaust, case studies	1	JANUARY	Dt - 03.01.2023
	Air (prevention and control of pollution) Act.	1		Dt. 04.01.2023
	Water (prevention and control of pollution) Act.	1		Dt. 05.01.2023
	Public awareness.	1		Dt. 06.01.2023
7	**UNIT 7 : HUMAN POPULATION AND THE ENVIRONMENT**	**8**		
	Population growth and variation among nations	1		Dt. 10.01.2023
	Population explosion- family welfare program	1		Dt. 11.01.2023
	Environment and humanhealth	1		Dt. 12.01.2023
	Human rights	1		Dt. 13.01.2023
	Value education	1		Dt. 17.01.2023
	Role of information technology in environment and human health	1		Dt. 18.01.2023
	Revision	1		Dt. 19.01.2023
	Class test	1		Dt. 20.01.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C1

NAME OF THE FACULTY : (1) ER. BABITA SAHU (H.O.D. IN CIVIL ENGG.) (2) ER. SWARNAPRAVA PARIDA, (LECT. IN CIVIL ENGG.) (3) ER. IPSITA NAYAK (T.A., CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: CIVIL ENGINEERING LAB.-I (PR-1)

CLASS ALLOTTED /WEEK:- 6 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
(I)	MATERIAL TESTING LABORATORY			
1	Determination of young's modulus of steel in a tensile testing machine.	SEPTEMBER	02	Dt. 16.09.2022, Dt.21.09.22
2	Determination of fineness of cement by sieving.		02	Dt. 23.09.2022, Dt. 28.09.2022
3	Determination of normal consistency, initial and final setting time of cement.	OCTOBER	02	Dt.30.09.2022, Dt.12.10.2022
4	Determination of soundness of cement by Le-chatelier apparatus.		02	Dt.14.10.2022, Dt.19.10.2022
5	Determination of compressive strength of cement.		02	Dt.21.10.2022, Dt.26.10.2022
6	Determination of compressive strength of burnt clay,fly ash bricks and blocks .	NOVEMBER	02	Dt.28.10.2022, Dt.02.11.2022
7	Grading of fine & coarse aggregate by sieving for concrete.		02	Dt.04.11.2022. Dt.09.11.2022
8	Determination of specific gravity and bulking of sand.		02	Dt.11.11.2022, Dt.16.11.2022
9	Determination of specific gravity and bulk density of coarse aggregate.		02	Dt.18.11.2022, Dt.23.11.2022
10	Grading of road aggregates.		02	Dt.25.11.2022, Dt.30.11.2022

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
11	Determination of flakiness ,elongation of road aggregates.	DECEMBER	02	Dt.02.12.2022, Dt.07.12.2022
12	Determination of crushing value test of aggregates.		02	Dt.09.12.2022, Dt.14.12.2022
13	Los -Angeles abrasion test of aggregate.		02	Dt.16.12.2022, Dt.21.12.2022
14	Impact test of aggregate.		02	Dt.23.12.2022, Dt.28.12.2022
15	Determination of soundness test of road aggregates.	JANUARY	02	Dt.30.12.2022, Dt.04.01.2023
(II)	CONCRETE LABORATORY			
16	Determination of compressive strength of concrete cubes		02	Dt.06.01.2023, Dt.11.01.2023
17	Determination of workability of concrete by: (a)Slump cone method (b)Compaction factor method.		02	Dt.13.01.2023, Dt.18.01.2023
18	Non destructive tests on concrete. (a)Demonstration on rebound hammer. (b)Ultrasonic pulse velocity measuring instrument.		02	Dt.18.01.2023, Dt.20.01.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C1

NAME OF THE FACULTY : (1) ER. JIBAN JYOTI ROUT, (LECT. IN CIVIL ENGG.), (2) ER. SATYAJIT BEHERA, (T.A., CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: CIVIL ENGINEERING DRAWING-1 (PR-2)

CLASS ALLOTTED /WEEK:- 5 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	AUTOCAD SOFTWARE			
	1.1.Recap of the draw ,format,edit, dimension,modify commands.	SEPTEMBER	03	Dt. 15.09.2022, Dt. 19.09.22 Dt. 22.09.2022
	1.2.Draw 2D drawings of the following building components,doors,windows,cross section through wall ,spread footing,column footing,stair case,R.C.C . T-beam and slab.	OCTOBER	03	Dt. 26.09.2022, Dt. 29.09.22 Dt. 10.10.2022
	1.3-Develop Isometric drawings of simple objects.		03	Dt. 13.10.2022, Dt. 17.10.2022 Dt. 20.10.2022
	1.4.Develope 3D drawing of simple objects.		02	Dt. 27.10.2022, Dt. 31.10.2022
2	PLAN,ELEVATION AND SECTIONAL ELEVATION OF FLAT ROOF BUILDING FROM LINE DIAGRAM AND GIVEN SPECIFICATION WITH USE OF AUTOCAD SOFTWARE.			
	2.1.Plan at window sill level of a single storeyed R.C. roof slab building with elevation and sectional views from given line diagram and specification.	NOVEMBER	03	Dt. 07.11.2022, Dt. 10.11.2022 Dt. 14.11.2022
	2.2.Detail drawing of double storeyed pucca building with R.C.C stair case from line diagram and given specification.		04	Dt. 17.11.2022, Dt. 21.11.2022 Dt. 24.11.2022, Dt. 28.11.2022

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	2.3.Preparation of approval drawing of a residental building as per the norms of local approving authority with site plan,index plan etc.	DECEMBER	03	Dt-01.12.2022, Dt.05.12.2022 Dt.08.12.2022
3	**PLAN,ELEVATION AND SECTIONAL ELEVATION OF FLAT ROOF BUILDING WITH AC SHEET/GC/TILES ON WOODEN STRUCTURE WITH USE OF AUTOCAD COMMANDS. Detail drawing of inlined roof building from given line diagram and specification (gabbled/hipped).**		04	Dt. 12.12.2022, Dt.15.12.2022 Dt.19.12.2022, Dt.22.12.22
4	**BUILDING PLANNING:**			
	4.1.Planning of building for specific cost based on approximate plinth area rate.		02	Dt. 26.12.2022 Dt. 29.12.2022
	4.2.Orientation of buildings,location of openings and living areas.	JANUARY	03	Dt. 02.01.2023 Dt. 05.01.2023, Dt.09.01.2023
	4.3.Line plan of school ,hostel ,market complex and dispensary building.		03	Dt. 12.01.2023, Dt.19.01.2023 Dt.16.01.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C1

NAME OF THE FACULTY : (1) ER. SWARNAPRAVA PARIDA, (2) ER. SUMANTA KUMAR SAHOO (LECT. IN CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: ESTIMATING PRACTICE (PR-3)

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	Preparation of plinth area estimate & detailed estimate for the following ;			
	1.1.Single storeyed two roomed building with specification as per orissa P.W.D schedule of rates and analysis of rates.	SEPTEMBER	03	Dt. 20.09.2022, Dt.27.09.22 Dt. 11.10.2022
	1.2.A two storeyed pucca building with specification as per orissa P.W.D schedule of rates and analysis of rates.	OCTOBER	03	Dt.18.10.2022, Dt.01.11.2022 Dt. 15.11.2022
2	Analysis of rates in detail for the above items of building basing on orissa Govt. analysis of rate with help of MS. Excel software.	NOVEMBER	03	Dt. 22.11.2022, Dt. 29.11.2022 Dt. 06.12.2022
3	Calculation of dry materials for different items of works basing on orissa Govt. analysis of rate with help of Excel software.	DECEMBER	03	Dt. 13.12.2022, Dt. 20.12.2022 Dt. 27.12.2022
4	Preparation of abstract of cost and bill of quantities of the estimates as per item no. 1.0 above with help of MS. EXCEL software.	JANUARY	03	Dt. 03.01.2023, Dt. 10.01.2023 Dt. 17.01.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C1

NAME OF THE FACULTY : (1) ER. SUMANTA KUMAR SAHOO (LECT. IN CIVIL ENGG.), (2) ER. IPSITA NAYAK, (3) ER. SATYAJIT BEHERA, (T.A., CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Library Study & Technical Quiz	September	03	Dt. 17.09.2022, 24.09.2022 Dt. 01.10.2022
02	Seminar On different Technical Topics	October	03	Dt. 15.09.2022, Dt. 29.10.2022 Dt. 29.10.2022
03	Seminar On different Environmental issues	November	03	Dt. 05.11.2022, 12.11.2022 Dt. 19.11.2022
04	Personality developement Class	December	03	Dt. 26.11.2022, Dt. 03.12.2022 Dt. 10.12.2022
05	Cultural Activities	January	04	Dt. 17.12.2022, Dt. 24.12.2022 Dt. 31.12.2022, Dt. 07.01.2023

S. Mahoo S. Behera Babita Sahu

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C2

NAME OF THE FACULTY : (1) ER. BABITA SAHU (H.O.D. IN CIVIL ENGG.) (2) ER. SWARNAPRAVA PARIDA (LECT. IN CIVIL ENGG.), (3) ER. IPSITA NAYAK (T.A., CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: CIVIL ENGINEERING LAB.-I (PR-1)

CLASS ALLOTTED /WEEK:- 6 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
(I)	MATERIAL TESTING LABORATORY			
1	Determination of young's modulus of steel in a tensile testing machine.	SEPTEMBER	02	Dt. 16.09.2022, Dt. 21.09.22
2	Determination of fineness of cement by sieving.		02	Dt. 23.09.2022, Dt. 28.09.22
3	Determination of normal consistency, initial and final setting time of cement.		01	Dt. 30.09.2022
4	Determination of soundness of cement by Le-chatelier apparatus.	OCTOBER	02	Dt. 12.10.2022, Dt. 14.10.2022
5	Determination of compressive strength of cement.		02	Dt. 19.10.2022, Dt. 21.10.2022
6	Determination of compressive strength of burnt clay,fly ash bricks and blocks .		02	Dt. 26.10.2022, Dt. 28.10.22
7	Grading of fine & coarse aggregate by sieving for concrete.	NOVEMBER	02	Dt. 02.11.2022, Dt. 04.11.22
8	Determination of specific gravity and bulking of sand.		02	Dt. 09.11.2022, Dt. 11.11.2022
9	Determination of specific gravity and bulk density of coarse aggregate.		02	Dt. 16.11.2022, Dt. 18.11.2022
10	Grading of road aggregates.		02	Dt. 23.11.2022, Dt. 25.11.2022

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
11	Determination of flakiness ,elongation of road aggregates.	DECEMBER	02	Dt.30.11.2022, Dt. 02.12.2022
12	Determination of crushing value test of aggregates.		02	Dt. 07.12.2022, Dt. 09.12.2022
13	Los -Angeles abrasion test of aggregate.		02	Dt.14.12.2022, Dt.16.12.2022
14	Impact test of aggregate.		02	Dt.21.12.2022, Dt. 23.12.2022
15	Determination of soundness test of road aggregates.		02	Dt.28.12.2022, Dt.30.12.2022
(II)	CONCRETE LABORATORY			
16	Determination of compressive strength of concrete cubes	JANUARY	02	Dt.04.01.2023, Dt.06.01.2023
17	Determination of workability of concrete by: (a)Slump cone method (b)Compaction factor method.		02	Dt.11.01.2023, Dt. 13.01.2023
18	Non destructive tests on concrete. (a)Demonstration on rebound hammer. (b)Ultrasonic pulse velocity measuring instrument.		02	Dt.18.01.2023, Dt. 20.01.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C2

NAME OF THE FACULTY : (1) ER. JIBAN JYOTI ROUT (LECT. IN CIVIL ENGG.) , (2) ER. SATYAJIT BEHERA, (T.A., CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: CIVIL ENGINEERING DRAWING-1 (PR-2)

CLASS ALLOTTED /WEEK:- 5 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	AUTOCAD SOFTWARE			
	1.1.Recap of the draw ,format,edit, dimension,modify commands.	SEPTEMBER	03	Dt. 15.09.2022, Dt. 19.09.2022 Dt.22.09.2022
	1.2.Draw 2D drawings of the following building components,doors,windows,cross section through wall ,spread footing,column footing,stair case,R.C.C . T-beam and slab.	OCTOBER	03	Dt. 26.09.2022, Dt. 29.09.2022 Dt. 10.10.2022
	1.3-Develop Isometric drawings of simple objects.		03	Dt. 13.10.2022, Dt. 17.10.2022 Dt. 20.10.2022
	1.4.Develope 3D drawing of simple objects.		03	Dt. 27.10.2022, Dt. 31.10.2022
2	PLAN,ELEVATION AND SECTIONAL ELEVATION OF FLAT ROOF BUILDING FROM LINE DIAGRAM AND GIVEN SPECIFICATION WITH USE OF AUTOCAD SOFTWARE.			
	2.1.Plan at window sill level of a single storeyed R.C. roof slab building with elevation and sectional views from given line diagram and specification.	NOVEMBER	04	Dt. 07.11.2022 , Dt. 10.11.2022 Dt. 14.11.2022, Dt. 17.11.2022
	2.2.Detail drawing of double storeyed pucca building with R.C.C stair case from line diagram and given specification.	DECEMBER	04	Dt. 21.11.2022, Dt. 24.11.2022 Dt. 28.11.2022, Dt. 01.12.2022

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	2.3.Preparation of approval drawing of a residental building as per the norms of local approving authority with site plan,index plan etc.		03	Dt. 05.12.2022, Dt.08.12.2022 Dt. 12.12.2022
3	**PLAN,ELEVATION AND SECTIONAL ELEVATION OF FLAT ROOF BUILDING WITH AC SHEET/GC/TILES ON WOODEN STRUCTURE WITH USE OF AUTOCAD COMMANDS.** **Detail drawing of inlined roof building from given line diagram and specification (gabbled/hipped).**		03	Dt. 15.12.2022 Dt. 19.12.2022 Dt. 22.12.2022
4	**BUILDING PLANNING:**			
	4.1.Planning of building for specific cost based on approximate plinth area rate.	JANUARY	03	Dt. 26.12.2022, Dt.29.12.22 Dt. 02.01.2023
	4.2.Orientation of buildings,location of openings and living areas.		03	Dt. 05.01.2023, Dt.09.01.2023 Dt. 12.01.2023
	4.3.Line plan of school ,hostel ,market complex and dispensary building.		02	Dt. 16.01.2023, Dt. 19.01.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2022 - 23

BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C2

NAME OF THE FACULTY : (1) ER. SWARNAPRAVA PARIDA, (3) SUMANTA KUMAR SAHOO (LECT. IN CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: ESTIMATING PRACTICE (PR-3)

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	Preparation of plinth area estimate & detailed estimate for the following ;			
1	1.1.Single storeyed two roomed building with specification as per orissa P.W.D schedule of rates and analysis of rates.	SEPTEMBER	03	Dt. 20.09.2022 Dt. 27.09.2022 Dt. 11.10.2022
	1.2.A two storeyed pucca building with specification as per orissa P.W.D schedule of rates and analysis of rates.	OCTOBER	03	Dt. 18.10.2022 Dt. 01.11.2022, Dt.15.11.2022
2	Analysis of rates in detail for the above items of building basing on orissa Govt. analysis of rate with help of MS. Excel software.	NOVEMBER	03	Dt.22.11.2022, Dt.29.11.2022 Dt.06.12.2022
3	Calculation of dry materials for different items of works basing on orissa Govt. analysis of rate with help of Excel software.	DECENBER	03	Dt.13.12.2022, Dt.20.12.2022 Dt.27.12.2022
4	Preparation of abstract of cost and bill of quantities of the estimates as per item no. 1.0 above with help of MS. EXCEL software.	JANUARY	03	Dt.03.01.2023, Dt.10.01.2023 Dt.17.01.2023

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BRANCH:- CIVIL ENGG. SEMESTER: 3RD SECTION:- C2

NAME OF THE FACULTY : (1) ER. SUMANTA KUMAR SAHOO (LECT. IN CIVIL ENGG.), (2) ER. IPSITA NAYAK, (3) ER. SATYAJIT BEHERA, (T.A., CIVIL ENGG.)

SEMESTER FROM DT.15.09.2022 TO 21.01.2023 PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES

CLASS ALLOTTED /WEEK :- 03 PERIODS

Sl. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
01	Library Study & Technical Quiz	September	03	Dt. 17.09.2022, Dt. 24.09.22 Dt. 01.10.2022
02	Seminar On different Technical Topics	October	03	Dt. 15.09.2022, Dt. 22.10.22 Dt. 29.10.2022
03	Seminar On different Environmental issues	November	03	Dt. 05.11.2022, Dt. 12.11.2022 Dt. 19.11.2022
04	Personality developement Class	December	03	Dt. 26.11.2022, Dt. 03.12.2022 Dt. 10.12.2022
05	Cultural Activities	January	04	Dt. 17.12.2022, Dt. 24.12.2022 Dt. 31.12.2022, Dt. 07.01.2023

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