

Discipline: Civil Engineering	Semestar- 3rd	Name Of the teaching Faculty: Smt. Laxmipriya Mohapatra
Subject-Structural Mechanics	No. of Days/per week class allotted:5	Semestar From Date : 1/08/2023 To Date: 30/11/2023
		No. Of Weeks: 16
Week	Day	Theory Topics to be covered
1. Review of basic concepts		
1st	1st	Basic Principle of Mechanics: Force, Moment, support conditions
	2nd	Conditions of equilibrium, C.G & MI, Review of C.G. and M.I of different sections
	3rd	Free body diagram and Review of C.G. and M.I of different sections
	4th	Numerical problems on C.G. And M.I.
2. Simple and complex stress, strain		
	5th	Introduction to stresses and strains Mechanical properties of materials – Rigidity, Elasticity, Plasticity, Compressibility, Hardness
2nd	1st	Mechanical properties of materials – Toughness,Stiffness,Brittleness,Ductility, Malleability,Creep,Fatigue,Tenacity,Durability
	2nd	Types of stresses -Tensile, Compressive and Shear
	3rd	Types of strains - Tensile, Compressive and Shear strains,
	4th	Complimentary shear stress-Diagonal tensile/compressive stresses due to shear ,Elongation and Contraction
	5th	Longitudinal and Lateral strains, Poissons Ratio,Volumetric Strain, Poissons Ratio,Change in dimensions and volume,numericals
3rd	1st	Hooke's law, Elastic Constants, Derivation of relationship between the elastic constants
	2nd	Behaviour of ductile and brittle materials under direct loads
	3rd	Stress Strain curve of a ductile material, Limit of proportionality, Elastic limit, Yield stress, Ultimate stress, Breaking stress
	4th	Percentage elongation, Percentage reduction in area, Significance of percentage elongation and reduction in area of cross section
	5th	Deformation of prismatic bars due to uniaxial load
4th	1st	Deformation of prismatic bars due to its self weight
	2nd	Principal stresses and strains: Occurrence of normal and tangential stresses
	3rd	Concept of Principal stress and Principal Planes, major and minor principal stresses and their orientations
	4th	Mohr's Circle and its application to solve problems of complex stresses
3.Stresses in Beams		

	5th	Bending stress in beams, Theory of simple bending, Assumptions, Moment of resistance
5th	1st	Equation for Flexure, Flexural stress distribution, Curvature of beam, Position of N.A. and Centroidal Axis,
	2nd	Flexural rigidity, Significance of Section modulus
	3rd	Shear stress distribution in beams concept
	4th	Shear stress distribution in beams of rectangular, circular and standard sections symmetrical about vertical axis
	5th	Concept of torsion, basic assumptions of pure torsion, torsion of solid and hollow circular sections,
6th	1st	polar moment of inertia, torsional shearing stresses, angle of twist, torsional rigidity, equation of torsion
	2nd	Combination of stresses, Combined direct and bending stresses,
	3rd	Maximum and Minimum stresses in Sections, Conditions for no tension,
	4th	Limit of eccentricity, Middle third/fourth rule, Core or Kern for square, rectangular and circular sections, chimneys, dams retaining walls
4. Columns and Struts		
	5th	Columns and Struts, Definition, Short and Long columns, End conditions, Equivalent length / Effective length, Slenderness ratio
7th	1st	Axially loaded short and long column, Euler's theory of long columns, Critical load for Columns with different end conditions
	2nd	Numerical problems on columns & struts.
	3rd	Numerical problems on columns & struts.
5. Shear Force and Bending Moment		
	4th	Types of Loads: Concentrated (or) Point load, Uniformly Distributed load (UDL), Types of Supports: Simple support, Roller support, Hinged support, Fixed support
	5th	Types of Reactions: Vertical reaction, Horizontal reaction, Moment reaction, Types of Beams based on support conditions
8th	1st	Calculation of support reactions using equations of static equilibrium
	2nd	Shear Force and Bending Moment: Signs Convention for S.F. and B.M,
	3rd	S.F and B.M of general cases of determinate beams with concentrated loads and udl only,
	4th	S.F and B.M diagrams for Cantilevers
	5th	S.F and B.M diagrams for Simply Supported Beams
9th	1st	S.F. and B.M. diagram for Overhanging Beams
	2nd	Position of maximum BM, Point of contra flexure, Point of Inflection
	3rd	Relation between intensity of load, S.F and B.M.
	4th	Numerical problems on S.F. & B.M.
	5th	Numerical problems on S.F. & B.M.
6. Slope and Deflection		

10th	1st	Shape and nature of elastic curve (deflection curve); Relationship between slope, deflection and curvature , Importance of slope and deflection
	2nd	Slope and deflection of cantilever under concentrated load (by Double Integration method)
	3rd	Slope and deflection of cantilever under uniformly distributed load(by Double Integration method)
	4th	Slope and deflection of cantilever under concentrated load (by Macaulay's method)
	5th	Slope and deflection of cantilever under uniformly distributed load (by Macaulay's method)
	1st	Numerical problems on cantilever beam.
11th	2nd	Slope and deflection of simply supported beams under concentrated and uniformly distributed load (by Double Integration method)
	3rd	Slope and deflection of simply supported beams under concentrated and uniformly distributed load (by Macaulay's method)
	4th	Numerical problems on simply supported beam using Double integration method.
	5th	Numerical problems on simply supported beam using Macaulay's method.
7. Indeterminate Beams		
12th	1st	Indeterminacy,principle of consistent deformation
	2nd	Analysis of propped cantileverbeams by principle of superposition
	3rd	Analysis of fixed and two span continuous beams by principle of superposition
	4th	SF and BM diagrams (point load and udl covering full span)
	5th	Types of trusses, statically determinate and indeterminate trusses
13th	1st	degree of indeterminacy
	2nd	Analysis of propped cantileverbeams by principle of superposition
	3rd	Analysis of fixed and two span continuous beams by principle of superposition
	4th	SF and BM diagrams (point load and udl covering full span)
	5th	Numerical problems.
8. Trusses		
14th	1st	Types of trusses, statically determinate
	2nd	Statically indeterminate trusses
	3rd	degree of indeterminacy
	4th	Numerical problems on degree of indeterminacy
	5th	stable and unstable trusses,
15th	1st	advantages of trusses

	2nd	Analytical method (Method of joints)
	3rd	Analytical method (Method of Section)
	4th	Method of Joints Numericals.
	5th	Method of Section Numericals.
16th	1st	Discussions & doubt clearing.
	2nd	Revision of chapter-1 & 2
	3rd	Revision of chapter-3 & 4
	4th	Revision of chapter-5 & 6
	5th	Revision of chapter-7 & 8

Laxmipriya Mohapatra

Signature of Faculty

Discipline-Civil Engineering	Semestar- 3rd	Name Of the teaching Faculty: Er.Rakesh Kumar Panda
Subject-Geotechnical Engineering	No. of Days/per week class allotted:4	Semestar From Date : 1/08/2023 To Date: 30/11/2023
		No. Of Weeks: 16
Week	Class Day	Theory/Practical Topics
1st	1st	Chapter- 1 Introduction Soil and Soil Engineering
	2nd	Scope of Soil Mechanics
	3rd	Origin and formation of soil
	4th	Chapter-2 Preliminary Definitions and Relationship Soil as a three Phase system
2nd	1st	Water Content, Density, Specific gravity, Voids ratio, Porosity, Percentage of air voids, air content
	2nd	Degree of saturation, density Index
	3rd	Bulk/Saturated/dry/submerged density
	4th	Interrelationship of various soil parameters
3rd	1st	Chapter- 3 Index Properties of Soil Water Content, Specific Gravity
	2nd	Particle size distribution: Sieve analysis, wet mechanical analysis
	3rd	Particle size distribution curve and its uses Consistency of Soils
	4th	Atterberg's Limits, Plasticity Index, Consistency Index, Liquidity Index
4th	1st	Atterberg's Limits, Plasticity Index, Consistency Index, Liquidity Index
	2nd	Chapter -4 Classification of Soil I.S. Classification
	3rd	I.S. Classification(classification Of Coarse grained Soil)
	4th	I.S. Classification(Numericals on IS classification)
5th	1st	I.S. Classification(Miscllaneous)
	2nd	Plasticity Chart
	3rd	Chapter- 5 Permeability and Seepage Concept of Permeability, Darcy's Law
	4th	Co-efficient of Permeability
6th	1st	Factors affecting Permeability
	2nd	Constant head permeability test
	3rd	Falling head permeability test
	4th	Compaction: Compaction
7th	1st	Seepage pressure
	2nd	Effective stress
	3rd	Phenomenon of quick sand
	4th	Chapter- 6 Compaction and Consolidation Compaction: Compaction, Light and heavy compaction Test
8th	1st	Optimum Moisture
	2nd	Content of Soil, Maximum dry density
	3rd	Zero air void line
	4th	Zero air void line

9th	1st	Factors affecting Compaction
	2nd	Field compaction methods and their suitability
	3rd	Field compaction methods and their suitability
	4th	Consolidation: Consolidation, distinction between compaction and consolidation
10th	1st	Terzaghi's model analogy of compression
	2nd	Terzaghi's model analogy of compression
	3rd	Springs showing the process of consolidation – field implications
	4th	Springs showing the process of consolidation – field implications
11th	1st	Chapter-7 Shear Strength Concept of shear strength
	2nd	Concept of shear strength
	3rd	Mohr- Coulomb failure theory
	4th	Cohesion, Angle of internal friction,
12th	1st	Cohesion, Angle of internal friction,
	2nd	strength envelope for different type of soil,
	3rd	Measurement of shear strength- Direct shear test
	4th	Triaxial shear test
13th	1st	Unconfined compression test and vane-shear test
	2nd	Chapter- 8 Earth Pressure on Retaining Structures Active earth pressure
	3rd	Passive earth pressure
	4th	Earth pressure at rest
14th	1st	Use of Rankine's formula for the following cases (cohesionless soil only) Backfill with no surcharge
	2nd	Backfill with uniform surcharge
	3rd	Chapter- 9 Foundation Engineering Functions of foundations, shallow and deep foundation
	4th	Different type of shallow and deep foundations with sketches
15th	1st	Types of failure (General shear, Local shear & punching shear)
	2nd	Bearing capacity of soil
	3rd	bearing capacity of soils using Terzaghi's formulae
	4th	IS Code formulae for strip
16th	1st	Circular and square footings
	2nd	Effect water table on bearing capacity of soil
	3rd	Effect water table on bearing capacity of soil
	4th	Plate load test and standard penetration test

Rakesh Ku. Panda.

Signature of The Faculty

Discipline-Civil Engineering	Semester-3rd	Name of the teaching faculty:- Er. Diptirani Mishra
Subject:- Building Material & Construction Technology	No. of days /per week class allotted:-5	Semester From Date:01/08/2023 to 30/11/2023
		No. of weeks-16
Week	Class Day	Theory/Practical Topics
		BUILDING MATERIALS
1st	1st	CHAPTER-1(STONE):- Classification of rock
	2nd	Uses of stone, natural bed of stone
	3rd	Qualities of good building stone
	4th	Dressing of stone
	5th	Characteristics of different types of stone and their uses
2nd	1st	CHAPTER-2(BRICKS):- Brick earth – its composition
	2nd	Brick making – Preparation of brick earth, Moulding, Drying
	3rd	Burning in kilns (continuous Process)
	4th	Classification of bricks, size of traditional and modular bricks
	5th	Qualities of good building bricks
3rd	1st	CHAPTER-3:- (CEMENT, MORTAR AND CONCRETE) Cement: Types of cements
	2nd	Manufacturing of cement
	3rd	Properties of cements
	4th	Importance and application of blended cement with fly ash and blast furnace slag.
	5th	Mortar: Definition and types of mortar
4th	1st	Sources and classification of sand, Bulking of sand
	2nd	Use of gravel, morrum and fly ash as different building material
	3rd	Concrete: Definition and composition- Water cement ratio-
	4th	Mixing, placing, compacting and curing of concrete
	5th	CHAPTER-4:- (OTHER CONSTRUCTION MATERIALS) Classification of timber
5th	1st	Structure of timber
	2nd	Seasoning of timber – Importance
	3rd	Characteristics of good timber
	4th	Clay products and refractory materials – Definition and Classification
	5th	Properties and uses of refractory materials- tiles, terracotta, porcelain glazing.
6th	1st	Properties and uses of refractory materials- tiles, terracotta, porcelain glazing.
	2nd	Iron and Steel: Uses of cast iron, wrought iron, mild steel and tor steel
	3rd	Iron and Steel: Uses of cast iron, wrought iron, mild steel and tor steel
	4th	CHAPTER-5 (SURFACE PROTECTIVE MATERIALS):-Composition of Paints
	5th	Enamels, varnishes

7th	1st	Types and uses of surface protective materials like Paints, Enamels, Varnishes, Distempers, Emulsion, French polish and Wax Polish
	2nd	Types and uses of surface protective materials like Paints, Enamels, Varnishes, Distempers, Emulsion, French polish and Wax Polish
	3rd	Types and uses of surface protective materials like Paints, Enamels, Varnishes, Distempers, Emulsion, French polish and Wax Polish
		BUILDING CONSTRUCTION
	4th	CHAPTER-1(INTRODUCTION):- Buildings and classification of buildings based on occupancy
	5th	Different components of a building.
8th	1st	Site investigation – objectives, site reconnaissance and explorations
	2nd	CHAPTER-2(FOUNDATIONS):- Concept of foundation and its purpose
	3rd	Shallow fondation and its types
	4th	Deep fondation and its types
	5th	Shallow foundation-constructional details of : Spread foundations for walls
9th	1st	thumb rules for depth and width of foundation and thickness of concrete block
	2nd	Deep foundations: Pile foundations-their suitability
	3rd	classification of piles based on materials, function and method of installation.
	4th	CHAPTER-3(WALLS & MASONRY WORKS):- Purpose of walls
	5th	Classification of walls – load bearing, non-load bearing walls, retaining walls.
10th	1st	Classification of walls as per materials of construction: brick, stone, reinforced brick, reinforced concrete, precast, hollow and solid concrete block and composite masonry walls
	2nd	Partition Walls : Suitability and uses of brick and wooden partition walls
	3rd	Brick masonry : Definition of different terms
	4th	Bond – meaning and necessity: English bond for 1and 1-1/2 Brick thick walls
	5th	T, X and right angled corner junctions. Thickness for 1and 1-1/2 brick square pillars in English bon
11th	1st	Glossary of terms –String course, corbel, cornice, block-in-course, grouting, mouldings, templates,Throating, through stones, parapet, coping, pilaster and buttress
	2nd	CHAPTER-4:-(DOORS, WINDOWS AND LINTELS):- Glossary of terms used in doors and windows
	3rd	Doors – different types of doors
	4th	Doors – different types of doors
	5th	Windows – different types of windows
12th	1st	Windows – different types of windows
	2nd	Purpose of use of arches and lintels

	3rd	CHAPTER-5(FLOORS, ROOFS AND STAIRS) 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
	4th	Roofs: Glossary of terms, Types of roofs, concept and function of flat, pitched, hipped and Sloped roofs
	5th	Roofs: Glossary of terms, Types of roofs, concept and function of flat, pitched, hipped and Sloped roofs
13th	1st	Stairs: Glossary of terms; Stair case, winder, landing, stringer, newel, baluster, rise, tread, width of stair case, hand rail, nosing, head room, mumty room
	2nd	Various types of stair case – straight flight, dog legged, open well, quarter turn, half turn (newel and geometrical stairs)
	3rd	bifurcated stair, spiral stair, cantilever stair, tread riser stair
	4th	CHAPTER-6(PROTECTIVE, DECORATIVE FINISHES, DAMP AND TERMITE PROOFING):- Plastering – purpose – Types of plastering, Types of plaster finishes – Grit finish, rough cast, smooth cast, sand faced, pebble dash, acoustic plastering and plain plaster etc
	5th	Proportion of mortars used for different plasters, preparation of mortars,
14th	1st	Techniques of plastering and curing
	2nd	Pointing – purpose –Types of pointing
	3rd	Painting – objectives – method of painting new and old wall surfaces, wood surface and metal surfaces –
	4th	powder coating and spray painting on metal surfaces.
	5th	White washing – Colour washing – Distempering – internal and external walls.
15th	1st	Damp and Termite proofing – Materials and Methods.
	2nd	Damp and Termite proofing – Materials and Methods
	3rd	CHAPTER-7(GREEN BUILDINGS, ENERGY MANAGEMENT AND ENERGY AUDIT OF BUILDINGS & PROJECT):- Concept of green building
	4th	ntroduction to Energy Management and Energy Audit of Buildings
	5th	Aims of energy management of buildings.
16th	1st	Types of energy audit, Response energy audit questionnaire
	2nd	Types of energy audit, Response energy audit questionnaire
	3rd	Energy surveying and audit report.
	4th	Revision
	5th	Revision

Deeptirani Mishra

Signature of the Faculty

Discipline: Civil Engineering	Semestar-3rd	Name Of the teaching Faculty: Smt.Pramila Kumari Gouda
Subject: ESTIMATION & COST EVALUATION	No. of Days/per week class allotted:4	Semestar From Date : 1/08/2023 To Date: 30/11/2023
		No. Of Weeks: 16
Week	Day	Theory Topics to be covered
1st	1st	CHAPTER 1 Introduction
	2nd	1.1 Types of estimates – Plinth area, floor area / carpet area
	3rd	1.2 Units and modes of measurements as per IS 1200
	4th	1.3 Accuracy of measurement for different item of work
2nd	1st	CHAPTER 2 Quantity Estimate of Building
	2nd	Short wall long wall method and centre line method
	3rd	deductions in masonry, plastering, white washing, painting etc.,
	4th	deductions in masonry, plastering, white washing, painting etc.,
3rd	1st	multiplying factor (paint coefficients) for painting of doors and windows (paneled/glazed), grills etc.
	2nd	multiplying factor (paint coefficients) for painting of doors and windows (paneled/glazed), grills etc.
	3rd	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.
	4th	Detailed estimate of plan 1 by long wall short wall
4th	1st	Detailed estimate of plan 1 by center line method
	2nd	Detailed estimate of plan 1 by center line method
	3rd	Detailed estimate of plan 1 by center line method
	4th	Detailed estimate of plan 2 by long wall short wall
5th	1st	Detailed estimate of plan 2 by long wall short wall
	2nd	Detailed estimate of plan 2 by center line method
	3rd	Detailed estimate of plan 3 by long wall short wall
	4th	Detailed estimate of plan 3 by long wall short wall
6th	1st	Detailed estimate of plan 3 by long wall short wall
	2nd	Detailed estimate of plan 3 by center line method
	3rd	Detailed estimate of plan 3 by center line method
	4th	Detailed estimate of plan 3 by center line method
7th	1st	Detailed estimate of plan 4 by long wall short wall
	2nd	Detailed estimate of plan 4 by long wall short wall
	3rd	Detailed estimate of plan 4 by long wall short wall
	4th	Detailed estimate of plan 4 by long wall short wall
8th	1st	Detailed estimate of plan 4 by long wall short wall
	2nd	Detailed estimate of plan 4 by long wall short wall
	3rd	Detailed estimate of plan 4 by long wall short wall
	4th	Detailed estimate of plan 4 by long wall short wall
9th	1st	Detailed estimate of plan 5
	2nd	Detailed estimate of plan 5
	3rd	Detailed estimate of plan 5
	4th	Detailed estimate of plan 5
	1st	Detailed estimate of plan 5


10th	2nd	CHAPTER 3 Analysis of Rates and Valuation Analysis of rates for cement concrete,
	3rd	Analysis of rates for Laterite stone masonry in Cement Mortar,
	4th	Analysis of rates for Laterite stone masonry in Cement Mortar,
	1st	Analysis of rates for Laterite stone masonry in Cement Mortar,
11th	2nd	Analysis of rates for cement plaster, white washing,
	3rd	Analysis of rates for cement plaster, white washing,
	4th	Analysis of rates for Artificial Stone flooring
	1st	Analysis of rates for Artificial Stone flooring
12th	2nd	Analysis of rates for Tile flooring, concrete flooring,
	3rd	Analysis of rates for Tile flooring, concrete flooring,
	4th	Analysis of rates for reinforcing steel,
	1st	Analysis of rates for reinforcing steel,
13th	2nd	Painting of doors and windows etc. as per OPWD.
	3rd	Painting of doors and windows etc. as per OPWD.
	4th	Painting of doors and windows etc. as per OPWD.
	1st	Calculation of lead, lift, conveyance charges, royalty of materials, etc. as per Orissa P.W.D. system (Concept of C.P.W.D./Railways provisions
14th	2nd	as per Orissa P.W.D. system (Concept of C.P.W.D./Railways provisions
	3rd	Analysis of rates for R.C.C. with centering and shuttering,
	4th	Abstract of cost of estimate.
	1st	Valuation- Value and cost, scrap value, salvage value,
15TH	2nd	assessed value, sinking fund, depreciation and obsolesce, methods of
	3rd	valuation
	4th	CHAPTER 4 Administrative Set-Up of Engineering Organisations
	1st	Administrative set-up and hierarchy of Engineering department in State Govt./Central Govt./PSUs/Private Sectors etc. Duties and responsibilities of Engineers at different positions /levels.
2nd		
3rd		
4th		
16TH		

Pramila K. Gouda

Signature of the Faculty

Discipline-Civil Engineering	Semester-3rd	Name of the teaching faculty:- Er. Diptirani Mishra & Er. Pramila kumari Gouda
Subject:- Civil Engineering Material -I	No. of days /per week class allotted:-6	Semester From Date:01/08/2023 to 30/11/2023
Week	Class Day(3 period per day)	Theory/Practical Topics
1st	1st	Determination of fineness of Cement by sieving
	2nd	Determination of normal Consistency of cement
2nd	1st	Record checking and sessional viva
	2nd	Initial and final setting time of Cement
3rd	1st	Determination of Compressive Strength of cement
	2nd	Determination of soundness of Cement by Le-Chatelier apparatus
4th	1st	Determination of Compressive Strength of Burnt clay Bricks
	2nd	Record checking and sessional viva
5th	1st	Determination of Compressive Strength of Fly Ash Bricks and Blocks
	2nd	Grading of Fine aggregate by seiving
6th	1st	Grading of Coarse aggregate by seiving
	2nd	Record checking and sessional viva
7th	1st	Determination of Specific Gravity of coarse aggregate
	2nd	Bulk density of coarse aggregate


8th	1st	Grading of Road Aggregates
	2nd	Bulking of sand
9th	1st	Bulking of sand
	2nd	Record checking and sessional viva
10th	1st	Determination of Flakiness index
	2nd	Determination of Elongation Index
11th	1st	Determination of Crushing Value Test of aggregates
	2nd	Los-Angeles Abrasion Test of aggregate.
12th	1st	Record checking and sessional viva
	2nd	Impact test of aggregate
13th	1st	Determination of soundness test of road aggregates
	2nd	Determination of Compressive Strength of concrete cubes
14th	1st	Slump Cone method for workability of concrete
	2nd	Record checking and sessional viva
15th	1st	Compaction Factor method for workability of concrete
	2nd	Demonstration on Rebound hammer

16th	1st	Demonstration on Rebound hammer
	2nd	Determination of Young's Modulus of steel in a tensile testing machine
 Signature of The Faculty		

Discipline-Civil Engineering	Semestar- 3rd	Name Of the teaching Faculty: Rakesh Kumar Panda & Brundaban Gamango
Subject- Civil Engineering Drawing- 1	No. of Days/per week class allotted: 5 (per group)	Semestar From Date : 01/08/2023 To Date:30/11/2023
		No. Of Weeks: 16
Week	Class Day	Theory/Practical Topics
1st	1st (2 Periods)	CHAPTER-1(Auto-CAD Software) Recap of Auto CAD, Draw & Modify Commands
2nd	1st (3 Periods)	Edit, Dimension Commands
	2nd (2 Periods)	Isometric drawings of simple objects
3rd	1st (3 Periods)	Isometric drawings of simple objects & Praticce
	2nd (2 Periods)	2D drawings of the following Building Door, Window, Stair Case
4th	1st (3 Periods)	2D drawings of the following- Building through wall,
	2nd (2 Periods)	Praticce
5th	1st (3 Periods)	Praticce
	2nd (2 Periods)	Praticce
6th	1st (3 Periods)	3D drawing of simple objects & Praticce
	2nd (2 Periods)	Praticce
7th	1st (3 Periods)	3D drawing of simple objects & Praticce
	2nd (2 Periods)	3D drawing of simple objects & Praticce
8th	1st (3 Periods)	CHAPTER-2 (PLAN, ELEVATION AND SECTIONAL ELEVATION OF FLAT ROOF BUILDING FROM LINE DIAGRAM AND GIVEN SPECIFICATIONS with use of AutoCAD software.) Plan at window sill level of a single storeyed R.C. roof slab building with elevation and sectional views form given line diagram and
	2nd (2 Periods)	Plan at window sill level of a single storeyed R.C. roof slab building with elevation and sectional views form given line diagram and specification.
9th	1st (3 Periods)	Praticce
	2nd (2 Periods)	Detail drawing of Double storeyed pucca building with R.C.C. stair case from line diagram and given
10th	1st (3 Periods)	Praticce
	2nd (2 Periods)	Praticce
11th	1st (3 Periods)	Preparation of approval drawing of a residential building as per the norms of local approving
	2nd (2 Periods)	Praticce

12th	1st (3 Periods)	CHAPTER-3 (PLAN, ELEVATION AND SECTION OF INCLINED ROOF BUILDING WITH AC SHEET/GCI/TILES ON WOODEN STRUCTURE with use of AutoCAD Commands) Detail drawing of inclined roof building from given line diagram and specification. (gabled / hipped)
	2nd (2 Periods)	Pratice
13th	1st (3 Periods)	Pratice
	2nd (2 Periods)	Different type of shallow and deep foundations with sketches
14th	1st (3 Periods)	CHAPTER-4 (BUILDING PLANNING) Orientation of buildings, location of openings and living areas & Pratice
	2nd (2 Periods)	Line plan of School, hostel, market complex and dispensary building & Pratice
15th	1st (3 Periods)	Planning of buildings for specific cost based on approximate plinth area rate.
	2nd (2 Periods)	Pratice
16th	1st (3 Periods)	Pratice
	2nd (2 Periods)	Pratice
<p><i>Rakesh Ku. Panda.</i></p> <p>Signature of The Faculty</p>		

Discipline: Civil Engineering	Semestar-3rd	Name Of the teaching Faculty: Smt.Pramila Kumari Gouda
Subject: ESTIMATING PRACTICE-I (Pr3)	No. of Days/per week class allotted:3	Semestar From Date : 01/08/2023 To Date: 30/11/2023
		No. Of Weeks: 16
Week	Day	Theory Topics to be covered
1ST	1ST	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
2ND	1ST	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
3RD	1ST	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
4TH	1ST	A two storeyed pucca Building with specification as per Orissa P.W.D. schedule of rates and analysis of rates
5TH	1ST	A two storeyed pucca Building with specification as per Orissa P.W.D. schedule of rates and analysis of rates
6TH	1ST	A two storeyed pucca Building with specification as per Orissa P.W.D. schedule of rates and analysis of rates
7TH	1ST	Analysis of rates in detail for the above items of works basing on Orissa Govt. analysis of rate with help of MS Excel software.
8TH	1ST	Analysis of rates in detail for the above items of works basing on Orissa Govt. analysis of rate with help of MS Excel software.
9TH	1ST	Analysis of rates in detail for the above items of works basing on Orissa Govt. analysis of rate with help of MS Excel software.
10TH	1ST	Calculation of dry materials for different items of building basing on Orissa Govt. analysis of rate with help of MS Excel software
11TH	1ST	Calculation of dry materials for different items of building basing on Orissa Govt. analysis of rate with help of MS Excel software
12TH	1ST	Calculation of dry materials for different items of building basing on Orissa Govt. analysis of rate with help of MS Excel software
13TH	1ST	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
14TH	1ST	Preparation of abstract of cost and bill of quantities of the

15TH	1ST	estimates as per item no. 1.0 above with help of MS Excel software
16TH	1ST	
 Signature of the Faculty		