R.K INSTITUTE OF ENGINEERING & TECHNOLOGY
At/Po: Kantapada-Apuja, Niali, Dist- Cuttack, Odisha
DEPARTMENT OF CIVIL ENGINEERING
LESSON PLAN

Disciplin e:Civil Engg	Semester:4th	Name of the Teaching faculty: Poonam Behera	
Subject: Structur al Design-I Th-1	No of Days/Week class alloted: 5 days	Semester from Date: 17/02/2023 To Date: 25/05/23 No of weeks: 16	Status
Week	ClassDay	Topics	
1st	1st	Working stress method (WSM) : Objectives of design and detailing. State the different methods of design of concretestructures.	Completed
	2nd	Introduction to reinforced concrete, R.C. sections their behavior,gradesof concrete and steel. Permissible stresses, assumptionin W.S.M.	
	3rd	Flexural design and analysis of single reinforced sections fromfirst principles.	
	4th	Concept of under reinforced, over reinforced and balancedsections.	
	5th	Advantages and disadvantages of WSM, reasons for its obsolescence	
2nd	1st	Philosophy Of Limit State Method (LSM) Definition, Advantages of LSM over WSM, IS code suggestionsregardingdesign philosophy.	Completed
	2nd	Types of limit states, partial safety factors for materials strength, characteristic strength, characteristic load, design load, loading on structure as per I.S. 875	
	3rd	Study of I.S specification regarding spacing of reinforcement inslab, cover to reinforcement in slab, beam column & footing, minimum reinforcement in slab, beam & column, lapping, anchorage, effective span for beam & slab.	
	4th	Analysis and Design of Single and Double Reinforced Sections(LSM) Limit state of collapse (flexure), Assumptions, Stress-Strain relationship for concrete and steel	
	5th	neutral axis, stress block diagram and strain diagram for singlyreinforcedsection.	
3rd	1st	Concept of under- reinforced, over-reinforced and limitingsection, neutral axis co-efficient	completed
	2nd	limiting value of moment of resistance and limiting percentage ofsteel required for limiting singly R.C. section.	
	3rd	Analysis and design: determination of design constants	
	4th	moment of resistance and area of steel for rectangular sections	
	5th	Necessity of doubly reinforced section, design of doublyreinforced rectangular section	
4th	1st	problems	
	2nd	problems	

	3rd	problems	
	4th	problems	
	5th	problems	
	1st	problems	
	2nd	problems	
5th	3rd	Shear, Bond and Development Length (LSM) Nominal shear stress in R.C. section, design shear strength of concrete,maximum shear stress, design of shear reinforcement,minimum shear reinforcement, forms of shear reinforcement.	Completed
	4th	Bond and types of bond, bond stress, check for bond stress, development length in tension and compression, anchoragevalue for hooks 900 bend and 450 bend standards lapping ofbars, check for development length.	
	5th	Numerical problems on deciding whether shear reinforcement isrequiredor not, check for adequacy of the section in shear	
	1st	Design of shear reinforcement; Minimum shear reinforcement in beams (Explain through examples only).	
	2nd	Analysis and Design of T-Beam (LSM) General features, advantages, effective width of flange as per IS:456-2000 code provisions	Completed
5th	3rd	Analysis of singly reinforced T-Beam, strain diagram & stress diagram, depth of neutral axis, moment of resistance of T-beamsection with neutralaxis lying within the flange	
	4th	numerical problems	
	5th	Simple numerical problems on deciding effective flange width. (Problems only on finding moment of resistance of T-beam section when N.A. lies within or up to the bottom of flange shallbe asked in written examination)..	
	1st	numerical problems	
7th	2nd	numerical problems	
	3rd	numerical problems	
	4th	numerical problems	Completed
	1st	numerical problems	
8th	2nd	numerical problems	
	3rd	numerical problems	
	4th	numerical problems	
	1st	numerical problems	
	2nd	numerical problems	
9th	3rd	numerical problems	
	4th	Analysis and Design of Slab and Stair case (LSM) Design of simply supported one-way slabs for flexure check fordeflectioncontrol and shear	
	1st	Design of one-way cantilever slabs and cantilevers chajjas for flexure check for deflection control and check for developmentlength andshear.	Completed
10th	2nd	Design of two-way simply supported slabs for flexure with cornerfree tolift.	
	3rd	Design of dog-legged staircase	
	4th	Detailing of reinforcement in stairs spanning longitudinally	
11th	1st	numerical problems	

	2nd	numerical problems	
	3rd	numerical problems	
	4th	numerical problems	
12th	1st	numerical problems	completed
	2nd	numerical problems	
	3rd	numerical problems	
	4th	numerical problems	
13th	1st	numerical problems	completed
	2nd	numerical problems	
	3rd	Design of Axially loaded columns and Footings (LSM) Assumptions in limit state of collapse- compression.	
	4th	Definition and classification of columns, effective length of column. Specification for minimum reinforcement; cover, maximum reinforcement, number of bars in rectangular, squareand circular sections, diameter and spacing of lateral ties.	
	5th	Analysis and design of axially loaded short square, rectangularand circular columns (with lateral ties only).	
14th	1st	Types of footing, Design of isolated square column footing ofuniform thickness for flexure and shear.	completed
	2nd	numerical problems	
	3rd	numerical problems	
	4th	numerical problems	
	5th	numerical problems	
15th	1st	numerical problems	completed
	2nd	numerical problems	
	3rd	numerical problems	
	4th	numerical problems	
	5th	numerical problems	
16th	1st	CLASS TEST 3, PREVIOUS YEAR QUESTIONS, QUIZ	

LearningResources:

Sl No.	Author Name	Name of the Book
1	N.Subramanian	Design of Reinforced Concrete Structures
2	N.C.Sinha,S.K.Roy	Fundamentals of Reinforced Concrete
3	IS:456-2000	Code Book

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DEPARTMENT OF CIVIL ENGINEERING
LESSON PLAN

Disciplin e:Civil Engg	Semester: 4th	Name of the Teaching faculty- Annapurna Malik	
Subject: Hydraulic & Irrigation Engg. Th-2	No of Days/Weekclass alloted: 5 days	Semester from Date: 1/02/23 To Date: 25/05/23 No of weeks: 15	Status
Week	**Class Day**	**Topic**	
1st	1st	Theory Topics	Completed
	2nd	HYDROSTATICS definition	
	3rd	Use of hydrostatic	
	4th	Branches of hydrostatics	
	5th	Properties of fluid	
2nd	1st	Density	Completed
	2nd	types of Density	
	3rd	specific gravity	
	4th	types of specific gravity	
	5th	Numerical problems density	
3rd	1st	Numerical problems specific gravity	Completed
	2nd	surface tension, capillarity	
	3rd	Numerical problems on surface tension	
	4th	Numerical problems on capillarity	
	5th	viscosity	
4th	1st	their uses	Completed
	2nd	Pressure and its measurements:	
	3rd	intensity of pressure	
	4th	atmospheric pressure, gauge pressure	
	5th	absolute pressure and vacuum pressure	
5th	1st	relationship between atmospheric pressure, absolute pressure and gauge pressure	Completed
	2nd	Pressure exerted on an immersed surface: Total pressure, resultant pressure	
	3rd	expression for total pressure exerted on horizontal & vertical surface	
	4th	Numerical problems on total pressure exerted on horizontal & vertical surface	
	5th	KINEMATICS OF FLUID FLOW:	

		Practical applications of Bernoulli's equation. Flow over Notchesand Weirs Notches, Weirs, types of notches and weirs	
6th	1st	Discharge through different types of notches and weirs-their application	Completed
	2nd	Types of flow through the pipes: uniform and non-uniform; laminar and turbulent; steady and unsteady;	
	3rd	Reynold's number and its application Losses of head of a liquid flowing through pipes	
	4th	Losses of head of a liquid flowing through pipes: Different types of major and minor losses.,	
	5th	Simple numerical problems on losses due to friction using Darcy's equation Flow through the Open Channels	
7th	1st	Total energy lines & hydraulic gradient lines discharge formulae-	Completed
	2nd	Chezy's and Manning's equation, best economical section	
	3rd	PUMPS: Type of pumps	
	4th	Centrifugal pump: basic principles, operation, discharge	
	5th	Types of channel sections-rectangular, trapezoidal and circular horse power & efficiency	
8th	1st	Reciprocating pumps: types	
	2nd	operation, discharge, horse power & efficiency	
	3rd	Hydrology, Hydrology Cycle	
	4th	Rainfall: types, intensity, hyetograph	
	5th	Estimation of rainfall	
9th	1st	rain gauges, Its types	
	2nd	Concept of catchment area, types, run-off	
	3rd	estimation of flood discharge by Dicken's and Ryve's formulae	
	4th	Water Requirement of Crops,	
		Definition of irrigation, necessity, benefits of irrigation	
10th	1st	types of irrigation, Crop season	Completed
	2nd	Duty, Delta and base period their relationship	
	3rd	overlap allowance, kharif and rabi crops, Gross command area, culturable command area	
	4th	Intensity of Irrigation, irrigable area, time factor, crop ratio	
	5th	FLOW IRRIGATION: Canal irrigation, types of canals	
11th	1st	loss of water in canals, Perennial irrigation	Completed
	2nd	Different components of irrigation canals and their functions	
	3rd	Sketches of different canal cross-sections 3.5 Classification of canals according to their alignment	
	4th	Various types of canal lining – Advantages and disadvantages	
	5th	WATER LOGGING AND DRAINAGE	
12th	1st	Causes and effects of water logging detection prevention and remedies	Completed
	2nd	DIVERSION HEAD WORKS AND REGULATORY STRUCTURES	
	3rd	Necessity and objectives of diversion head works	
	4th	weirs and barrages	
	5th	General layout, functions of different parts of barrage	

13th	1st	Functions of regulatory structures	Completed
	2nd	CROSS DRAINAGE WORKS	
	3rd	Functions and necessity of Cross drainage works	
	4th	aqueduct, siphon, super passage, level crossing	
	5th	Concept of each with help of neat sketch	
14th	1st	DAMS Necessity of storage reservoirs	Completed
	2nd	types of dams Earthen dams: types, description	
	3rd	causes of failure and protection measures	
	4th	Gravity dam- types, description	
	5th	Spillways Types (With Sketch) and necessity	
15th		CLASS TEST 3, PREVIOUS YEAR QUESTIONS, QUIZ	

LearningResources:

Sl No.	Author Name	Name of the Book
1	Modi & Seth	Fluid Mechanics & Hydraulic machines
2	D.R. Biswal	Hydraulics & Fluid Mechanics
3	R.K.Rajput	A Text Book of Fluid Mechanics & Hydraulic machines

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LESSON PLAN

Discipline:Civil Engg	Semester:4th	Name of the Teaching faculty: Monalisa Barik	Status
Subject: Land Survey-I Th-3	No of Days/Week class alloted: 5 days	Semester from Date: 17/02/23 To Date: 25/05/23 No of weeks- 16	
Week	Class Day	Topics	
1st	1st	INTRODUCTION TO SURVEYING, LINEAR MEASUREMENTS	Completed
	2nd	Surveying: Definition	
	3rd	Aims and objectives	
	4th	Principles of survey-Plane surveying- Geodetic Surveying	
	5th	Instrumental surveying.	
2nd	1st	Precision and accuracy of measurements	Completed
	2nd	instruments used for measurement of distance	
	3rd	Types of tapes and chains	
	4th	Errors and mistakes in linear measurement	
	5th	classification, Sources of errors and remedies	
3rd	1st	Corrections to measured lengths due to-incorrect length	Completed
	2nd	temperature variation, pull, sag	
	3rd	numerical problem applying corrections	
	4th	CHAINING AND CHAIN SURVEYING	
	5th	Equipment and accessories for chaining	
4th	1st	Ranging – Purpose, signaling, direct and indirect ranging	Completed
	2nd	Line ranger – features and use, error due to incorrect ranging	
	3rd	Methods of chaining –Chaining on flat ground	
	4th	Chaining on sloping ground – stepping method,	
	5th	Clinometer-features and use, slope correction	
5th	1st	Setting perpendicular with chain & tape	Completed
	2nd	Chaining across different types of obstacles –Numerical problems on chaining across obstacles	
	3rd	Purpose of chain surveying	
	4th	Its principles, concept of field book	
	5th	Selection of survey stations, base line, tie lines, Check lines	
6th	1st	Offsets – Necessity, Perpendicular and Oblique offsets	Completed
	2nd	Instruments for setting offset – Cross Staff, Optical Square.	
	3rd	Errors in chain surveying – compensating and accumulative errors causes& remedies	
	4th	Precautions to be taken during chain surveying	
	5th	ANGULAR MEASUREMENT AND COMPAS SURVEYING	
7th	1st	Measurement of angles with chain, tape & compass	

	2nd	Compass – Types, features, parts, merits & demerits	Completed
	3rd	testing & adjustment of compass	
	4th	Designation of angles- concept of meridians – Magnetic, True, arbitrary	
	5th	Concept of bearings – Whole circle bearing, Quadrantal bearing, Reduced bearing, suitability of application, numerical problems on conversion of bearings	
8th	1st	Use of compasses – setting in field-centering, leveling, taking readings, concepts of Fore bearing, Back Bearing	Completed
	2nd	Numerical problems on computation of interior & exterior angles from bearings	
	3rd	Effects of earth's magnetism – dip of needle, magnetic declination, variation in declination	
	4th	numerical problems on application of correction for declination	
	5th	Errors in angle measurement with compass – sources & remedies	
9th	1st	Principles of traversing – open & closed traverse,	Completed
	2nd	Methods of traversing.	
	3rd	Local attraction – causes, detection, errors, corrections	
	4th	Numerical problems of application of correction due to local attraction	
	5th	Errors in compass surveying – sources & remedies	
10th	1st	Plotting of traverse – check of closing error in closed & open traverse, Bowditch's correction, Gales table	Completed
	2nd	MAP READING CADASTRAL MAPS & NOMENCLATURE: Study of direction, Scale, Grid Reference and Grid Square	
	3rd	Study of Signs and Symbols	
	4th	Cadastral Map Preparation Methodology	
		Unique identification number of parcels, Positions of existing Control Points and its types	
11th	1st	Adjacent Boundaries and Features, Topology Creation and verification	Completed
	2nd	PLANE TABLE SURVEYING: Objectives, principles and use of plane table surveying.	
	3rd	Instruments & accessories used in plane table surveying.	
	4th	Methods of plane table surveying – (1) Radiation, (2) Intersection, (3) Traversing, (4) Resection	
	5th	Statements of TWO POINT and THREE POINT PROBLEM. Errors in plane table surveying and their corrections, precautions in plane tablesurveying.	
12th	1st	THEODOLITE SURVEYING AND TRAVERSING:	Completed
	2nd	Purpose and definition of theodolite surveying	
	3rd	Transit theodolite- Description of features, component parts, Fundamental axes of a theodolite, concept of vernier, reading a vernier	
	4th	Temporary adjustment of theodolite	
	5th	Concept of transiting –Measurement of horizontal and vertical angles	
13th	1st	Measurement of magnetic bearings, deflection angle, direct angle	Completed
	2nd	setting out angles, prolonging a straight line with theodolite	
	3rd	Errors in Theodolite observations	
	4th	Methods of theodolite traversing with – inclined angle method, deflection angle method, bearing method	
	5th	Plotting the traverse by coordinate method, Checks for open and closed traverse	

14th	1st	Traverse computation – consecutive coordinates, latitude and departure, Gale's traverse table	Completed
	2nd	Numerical problems on omitted measurement of lengths & bearings	
	3rd	Closing error – adjustment of angular errors, adjustment of bearings, numerical problems	
	4th	Balancing of traverse – Bowditch's method, transit method, graphical method, axis method	
	5th	calculation of area of closed traverse	
15th	1st	LEVELLING AND CONTOURING: Definition and Purpose and types of leveling– concepts of level surface, Horizontal surface, vertical surface, datum, R. L., B.M.	Completed
	2nd	Instruments used for leveling, concepts of line of collimation, axis of bubble tube, axis of telescope, Vertical axis	
	3rd	Levelling staff – Temporary adjustments of level	
	4th	taking reading with level, concept of bench mark, BS, IS, FS, CP, HI	
	5th	Field data entry – level Book – height of collimation method and Rise & Fall method, comparison	
16th	1st	Numerical problems on reduction of levels applying both methods, Arithmetic checks.	Completed
	2nd	Effects of curvature and refraction, numerical problems on application of correction	
	3rd	Reciprocal leveling – principles, methods, numerical problems, precise leveling	
	4th	Errors in leveling and precautions, Permanent and temporaryadjustments of different types of levels	
	5th	Definitions, concepts and characteristics of contours	
17th	1st	Methods of contouring, plotting contour maps, Interpretation of contour maps, toposheets	Completed
	2nd	Use of contour maps on civil engineering projects – drawing cross sections from contour maps, locating proposal routes of roads / railway / canal on a contour map	
	3rd	computation of volume of earthwork from contour map for simple structure. Map Interpretation: Interpret Human and Economic Activities (i.e.: Settlement, Communication, Land use etc.), Interpret Physical landform (i.e.: Relief, Drainage Pattern etc.), Problem Solving andDecision Making	
	4th	Determination of areas, computation of areas from plans. Calculation of area by using ordinate rule, trapezoidal rule, Simpson's rule	
18th	5th	Calculation of volumes by prismoidal formula and trapezoidal formula, Prismoidal corrections, curvature correction for volumes	
	1st	CLASS TEST 3, PREVIOUS YEAR QUESTIONS, QUIZ	

LearningResources:

Sl No.	Author Name	Name of the Book
1	Surveying andLevelling	R.Subramanian
2	Surveying,Vol.-I&II	Dr.B.C.Punmia.
3	A text Book of Surveying & Levelling	R. Agor

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LESSON PLAN

Discipline:Civil Engg	Semester:4th	Name of the Teaching faculty: Simran Priyadarshini	Status
Subject: Highway Engg Th-4	No of Days/Week class alloted: 5 days	Semester from Date: 7/2/23 toDate: 25/05/23 No of weeks:15	
Week	Class Day	Topics	
1st	1st	Introduction Importance of Highway transportation: importance organizations like Indian roads congress	completed
	2nd	Ministry of Surface Transport, Central Road Research Institute.	
	3rd	Functions of Indian Roads Congress	
	4th	IRC classification of roads	
	5th	Organisation of state highway department	
2nd	1st	Road Geometrics Glossary of terms used in geometric and their importance	completed
	2nd	Glossary of terms used in geometric and their importance	
	3rd	right of way, formation width	
	4th	road margin, road shoulder, carriage way, side slopes, kerbs, formation level	
	5th	road margin, road shoulder, carriage way, side slopes, kerbs, formation level	
3rd	1st	road margin, road shoulder, carriage way, side slopes, kerbs, formation level	completed
	2nd	camber and gradient	
	3rd	camber and gradient	
	4th	Design and average running speed, stopping and passing sight distance	
	5th	Design and average running speed, stopping and passing sight distance	
4th	1st	Design and average running speed, stopping and passing sight distance	completed
	2nd	Design and average running speed, stopping and passing sight distance	
	3rd	Necessity of curves, horizontal and vertical curves including transition curves	
	4th	Necessity of curves, horizontal and vertical curves including transition curves	
	5th	Necessity of curves, horizontal and vertical curves including transition curves	
5th	1st	Necessity of curves, horizontal and vertical curves including transition curves	

	2nd	Necessity of curves, horizontal and vertical curves including transition curves	Completed
	3rd	Necessity of curves, horizontal and vertical curves including transition curves	
	4th	super elevation, Methods o f providing super – elevation	
	5th	super elevation, Methods o f providing super – elevation	
6th	1st	Road Materials Difference types of road materials in use: soil, aggregates, and binders	Completed
	2nd	Difference types of road materials in use: soil, aggregates, and binders	
	3rd	Function of soil as highway Subgrade	
	4th	California Bearing Ratio: methods of finding CBR valued in the laboratory and at site and their significance	
	5th	California Bearing Ratio: methods of finding CBR valued in the laboratory and at site and their significance	
7th	1st	Testing aggregates: Abrasion test, impact test, crushing strengthtest, water absorption test & soundness test	Completed
	2nd	Testing aggregates: Abrasion test, impact test, crushing strengthtest, water absorption test & soundness test	
	3rd	Testing aggregates: Abrasion test, impact test, crushing strength test, water absorption test & soundness test	
	4th	Testing aggregates: Abrasion test, impact test, crushing strength test, water absorption test & soundness test	
	5th	Road Pavements Road Pavement: Flexible and rigid pavement, their merits and demerits, typical cross-sections	
8th	1st	functions of various components Flexible pavements	Completed
	2nd	Sub-grade preparation: Setting out alignment of road, setting out bench marks, control pegs for embankment and cutting, borrow pits, making profile of embankment	
	3rd	Sub-grade preparation: Setting out alignment of road, setting out bench marks, control pegs for embankment and cutting, borrow pits, making profile of embankment	
	4th	construction of embankment, compaction, stabilization, preparationof subgrade, methods of checking camber	
	5th	gradient and alignment as per recommendations of IRC, equipmentused for subgrade preparation	
9th	1st	Sub base Course: Necessity of sub base, stabilized sub base, purpose of stabilization (no designs)	Completed
	2nd	Types of stabilization Mechanical stabilizationLime stabilization Cement stabilizationFly ash stabilization	
	3rd	Base Course: Preparation of base course, Brick soling, stone soling and metalling	
	4th	Water Bound Macadam and wet-mix Macadam, Bituminous constructions: Different types	
	5th	Surfacing: Surface dressing	

		(i) Premix carpet and (ii) Semi dense carpet	
10th	1st	Bituminous concrete Grouting	completed
	2nd	Rigid Pavements: Concept of concrete roads as per IRC specifications	
	3rd	Hill Roads: Introduction: Typical cross-sections showing all details of a typicalhill road in cut, partly in cutting and partly in filling	
	4th	Introduction: Typical cross-sections showing all details of a typicalhill road in cut, partly in cutting and partly in filling	
	5th	Introduction: Typical cross-sections showing all details of a typicalhill road in cut, partly in cutting and partly in filling	
11th	1st	Introduction: Typical cross-sections showing all details of a typical hill road in cut, partly in cutting and partly in filling	completed
	2nd	Breast Walls, Retaining walls, different types of bends	
	3rd	Breast Walls, Retaining walls, different types of bends	
	4th	Breast Walls, Retaining walls, different types of bends	
	5th	Road Drainage: Necessity of road drainage work, cross drainage works	
12th	1st	Surface and sub-surface drains and storm water drains	completed
	2nd	Surface and sub-surface drains and storm water drains	
	3rd	Location, spacing and typical details of side drains, side ditches forsurface drainage	
	4th	Location, spacing and typical details of side drains, side ditches forsurface drainage	
	5th	intercepting drains, pipe drains in hill roads	
13th	1st	details of drains in cutting embankment, typical cross sections.	completed
	2nd	Road Maintenance : Common types of road failures – their causes and remedies	
	3rd	Maintenance of bituminous road such as patch work and resurfacing	
	4th	Maintenance of bituminous road such as patch work and resurfacing	
	5th	Maintenance of concrete roads – filling cracks, repairing joints, maintenance of shoulders (berm), maintenance of traffic control devices	
14th	1st	Maintenance of concrete roads – filling cracks, repairing joints, maintenance of shoulders (berm), maintenance of traffic control devices	completed
	2nd	Basic concept of traffic study, Traffic safety and traffic control signal	
	3rd	Basic concept of traffic study, Traffic safety and traffic control signal	
	4th	Construction equipments: Preliminary ideas of the following plant and equipment	
	5th	Hot mixing plant	
15th	1st	Tipper, tractors (wheel and crawler) scraper, bulldozer, dumpers, shovels, graders, roller dragline	completed
	2nd	Asphalt mixer and tar boilers	
	3rd	Road pavers	
	4th	Modern construction equipments for roads	
	5th	Modern construction equipments for roads	
16th	1st	CLASS TEST 3, PREVIOUS YEAR QUESTIONS, QUIZ	

LearningResources:

Sl No.	Author Name	Name of the Book
1	S.K.Khanna & C.E.G. Justo	Highway Engineering
2	S.P.Chandola	A Text Book Of Transportation Engineering
3	S.P.Bindra	A course on Highway engineering

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:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:- Dibyashree Bhuyan	
Subject SD-1	No. Of days / per week class allotted:-	Semester:- 4th from date: 12/03/22 To Date: 10/06/22 No. Of weeks:-	
Week	Class day.	Theory/ Practical Topics :	
FIRST	1st 12/03/2022	Working Stress method (WSM) - Objective of design & detailing. State the different method of design of concrete.	
	2nd 14/03/2022	Introduction to reinforced concrete, RC Section their behaviour grades of Concrete & Steel.	
	3rd 15/03/2022	Flexural design & analysis of Single reinforced section from First Principle.	
	4th 16/03/2022	Concept of under reinforced over reinforced & Balance Section.	
	5th 17/03/2022	Advantages & dis advantages of WSM, reason for its obsolesence.	
SECOND	1st 21/03/2022	Philosophy of limit state method (LSM) Defination of LSM over WSM, Is code Suggestions regarding design	
	2nd 22/03/2022	Types of limit states, Partial Safety factor for material strength, characteristics Strength, characteristics load, Design load	
	3rd 23/03/2022	Study of Is Specification regarding Spacing of reinforcem in slab, beam column & footing, minimum reinforcement in slab	
	4th 24/03/2022	Analysis & Design of Single & Double reinforced Section Limit State of Collapse, Assumption.	
	5th 26/03/2022	Stress - Strain relationship for concrete & steel	
THIRD	1st 28/03/2022	Neutral axis	
	2nd 29/03/2022	Stress block diagram & strain diagram for Singly reinforced Section.	
	3rd 30/03/2022	Numerical Problem	
	4th 31/03/2022	Concept of under-reinforced.	
	5th 04/04/2022	Over reinforced	
ORTH	1st 05/04/2022	Limiting Section	
	2nd 06/04/2022	Neutral axis Co-efficient	
	3rd 07/04/2022	Limiting Value of Moment Resistance	
	4th 09/04/2022	Limiting % of steel require for limiting Singly R.C. Section.	
	5th 11/04/2022	Analysis & design : Determination of design constant.	

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Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 12/04/2022	Moment of resistance & Area of Steel for rectangular Section.	
	2nd 13/04/2022	Necessity of doubly reinforced section, Design of Doubly reinforced rectangular section.	
	3rd 16/04/2022	Numerical Problem	
	4th 18/04/2022	Shear Bond & development Length (LSM) Nominal Shear stress in R.C.C sec^n, Design shear strength & Max^m shear stress	
	5th 19/04/2022	Bond & type of bond, bond stress, Check for bond stress Development length in tension & compression.	
SECOND	1st 20/04/2022	Numerical Problem on deciding weather shear reinforcement is required for not, check for adequacy	
	2nd 21/04/2022	Design of Shear reinforcement, minimum shear reinforcement in beams (Explain through example)	
	3rd 23/04/2022	Analysis & design of T beam (LSM) General features advantages, effective width of flange as per IS 456-200	
	4th 25/04/2022	Analysis of Singly reinforced T-Beam	
	5th 26/04/2022	Strain Diagram	
THIRD	1st 27/04/2022	Stress Diagram	
	2nd 02/05/2022	Depth of Neutral axis.	
	3rd 04/05/2022	Moment of Resistance of T beam Section	
	4th 05/05/2022	Neutral axis lying with in the flange	
	5th 05/05/2022	Simple Numerical Problems on deciding effective flange width.	
FORTH	1st 07/05/2022	Numerical Problem (problem only on finding MR of T beam Section when N-A lies with in up to the bottom of flange shall be asked in written examination)	
	2nd 09/05/2022		
	3rd 10/05/2022	Numerical Problem	
	4th 11/05/2022	Numerical Problem	
	5th 12/05/2022	Numerical Problem.	

-:LESSON PLAN:-

cipline	Semester	Name of the teaching faculty:-	
ject. SD-I	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 17/05/2022	Numerical Problem	
	2nd 17/05/2022	Numerical Problem	
	3rd 18/05/2022	Analysis of design of slab & Stair case (LSM) Design of simply supported oneway slab for flexibility check deflection control & shear.	
	4th		
	5th 21/05/2022	Design of One way Cantilever Slab	
SECOND	1st 23/05/2022	Design of Cantilever Chajja for flexure check for deflection control.	
	2nd 24/05/2022	check for development length	
	3rd 24/05/2022	check for development shear.	
	4th 26/05/2022	Design of two way simply supported slab for flexure with corner free to lift	
	5th 27/05/2022	Design of dog – legged Staircase	
THIRD	1st 28/05/2022	Detailing of reinforcement in stair spanning Longitudinally	
	2nd 31/05/2022	Numerical Problem	
	3rd 31/05/2022	Numerical Problem	
	4th 02/06/2022	Numerical Problem	
	5th 02/06/2022	Numerical Problem	
FORTH	1st 04/06/2022	Numerical Problem	
	2nd 06/06/2022	Numerical Problem.	
	3rd 07/06/2022	Design of axially loaded column & footing (LSM) Assumption & Limit State of Collapse.	
	4th 08/06/2022	Definition & Classification of Columns.	
	5th 08/06/2022	Effective length of Column.	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day.	Theory/ Practical Topics :	
FIRST	1st 09/06/2022	Specification for minimum reinforcement	
	2nd 09/06/2022	Cover	
	3rd 11/06/2022	Maximum reinforcement	
	4th 11/06/2022	Numbers of bars in rectangular	
	5th 13/06/2022	Square Section	
SECOND	1st 13/06/2022	Circular Section	
	2nd 14/06/2022	Diameter & Spacing of lateral ties.	
	3rd 15/06/2022	Spacing of lateral ties · Analysis & design of axially loaded short square.	
	4th 16/06/2022	Types of footing.	
	5th 18/06/2022	Design of isolated Square Column footing of uniform thickness for flexure & shear.	
THIRD	1st 20/06/2022	Numerical Problem	
	2nd 20/06/2022	Numerical Problem	
	3rd 20/06/2022	Numerical Problem	
	4th 21/06/2022	Numerical Problem	
	5th 21/06/2022	Numerical Problem.	
FORTH	1st		
	2nd		
	3rd		
	4th		
	5th		

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-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:- Annapurna Sethy	
Subject. Highway Engg.	No. Of days / per week class allotted:-	Semester 4th from date: 12/03/22 To Date: 10/06/22 No. Of weeks:-	
Week	Class day.	Theory/ Practical Topics :	
FIRST	1st 14/03/2022	Importance of highway transportation-	
	2nd 15/03/2022	organization like indian roads Congress, ministary of surface transport, central road reasearch institute.	
	3rd 16/03/2022	functions of IRC	
	4th 17/03/2022	IRC classification of roads.	
	5th 17/03/2022	organisation of state highway department	
S SECOND	1st 21/03/2022	Road geometrics.	
	2nd 21/03/2022	Glossary of terms used in geometric	
	3rd 22/03/2022	Importance of geometric	
	4th 23/03/2022	Right of way	
	5th 24/03/2022	formation width	
HI HIRD	1st 25/03/2022	Road margin	
	2nd 28/03/2022	Road shoulder	
	3rd 29/03/2022	Carriage way	
	4th 30/03/2022	Side slopes	
	5th 31/03/2022	Kerbs	
ORT ORTH	1st 31/03/2022	Formation level	
	2nd 04/04/2022	Camber & gradient	
	3rd 05/04/2022	Design and average running speed	
	4th 06/04/2022	Stopping and passing sight distance	
	5th 07/04/22	Necessity of curve.	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-
Subject	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-
Week	Class day	Theory/ Practical Topics :
FIRST	1st 08/04/2022	Horizontal and vertical curves including
	2nd 11/04/2022	transition curves and super elevation
	3rd 12/04/2022	Methods of providing super-elevation
	4th 13/04/2022	Numerical Problem of Super-elevation
	5th 18/04/2022	Neumerical problem
SECOND	1st 19/04/2022	Road materials
	2nd 20/04/2022	Different types of road materials inclu:
	3rd 21/04/2022	Soil, Aggregate and binders, functions of
	4th 22/04/2022	Soil as highway Subgrade, CBR Method of
	5th 25/04/2022	finding CBR valued in the laboratory and at site and their significance
THIRD	1st 26/04/202	Testing aggregates:- Abrasim test
	2nd 27/04/2022	Impact test
	3rd 02/05/2022	Crushing strength test
	4th 04/05/2022	Water absorption test & Soundness test
FORTH	5th 05/05/2022	Road Pavement: flexible & rigid Pavements, their
	1st 06/05/2022	merits and demerits typical cross section
	2nd 09/05/2022	flexible pavement: Subgrade preparation:- setting out alignment of road setting out benchmarks, control pegs.
	3rd 10/05/2022	for embankment and cutting, borrow, ed's making up notice of embankment Con' of embankment comp'n, stability
	4th 11/05/2022	Subgrade methods of checks, camber, gradient & alignment upper recom's of Pavement used for
	5th 12/05/2022	Subbase course:- necessity of subbase, stabilized sub base purpose of stabilization, types of stabilization Base course:- Preparation of base course brick soling stone soling & metalling water BM's wet mixing

-:LESSON PLAN:-

cipline	Semester	Name of the teaching faculty:-	
ject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 13/05/2022	Bituminous Construction:- Different types	
	2nd 17/05/2022	Surfacing:- Surfacing design (i) Premix Carpet (ii) Semi dense Concept	
	3rd 18/05/2022	Bituminous Concrete	
	4th 23/05/2022	Grouting	
	5th 23/05/2022	Rigid Pavements	
SECOND	1st 24/05/2022	Concept of Concrete roads	
	2nd 24/05/2022	As per IRC specifications	
	3rd 25/05/2022	Hill Roads	
	4th 25/05/2022	Introduction	
	5th 26/05/2022	Typical cross-section showing all details of a typical hill road incut	
	1st 26/05/2022	Partly in cutting and partly in filling	
	2nd 27/05/2022	Breast walls	
HIRD	3rd 31/05/2022	Retaining Wall	
	4th 31/05/2022	Different types of bends	
TH	5th 01/06/2022	Necessity of road drainage work, Cross drainage work	
	1st 01/06/2022	Surface & subsurface drain & storm water drains location	
ORTH	2nd 02/06/2022	Spacing and typical details of side drains	
	3rd 02/06/2022	Side ditches for surface drainage	
	4th 02/06/2022	Intercepting drains, pipe drains in hilly roads	
FOR	5th 03/06/2022	Details of drain in cutting embankment	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day.	Theory/ Practical Topics :	
FIRST	1st 06/06/2022	Typical Cross-Sections	
	2nd 06/06/2022	Common type of road failures:- their causes & remedies	
	3rd 07/06/2022	Maintenance of bituminous road such as Patch work & resurfacing	
	4th 07/06/2022	Maintenance of concrete road:- Filling cracks repairing joint & Maintenance of berm	
	5th 08/06/2022	Maintenance of Shoulder	
SECOND	1st 08/06/2022	Maintenance of traffic Control device	
	2nd 08/06/2022	Basic Concept of traffic study	
	3rd 09/06/2022	Traffic safety and traffic control	
	4th 09/06/2022	Survey Preliminary ideas of following plant	
	5th 09/06/2022	Hot mixing Plant	
THIRD	1st 10/06/2022	Tipers, tractors & crusher, bulldozer dumpers	
	2nd 10/06/2022	Shovels, graders, roller dragline	
	3rd 10/06/2022	Asphalt mixer and tar boilers	
	4th 10/06/2022	Road pavements	
	5th 10/06/2022	Modern construction equipment of roads	
FORTH	1st		
	2nd		
	3rd		
	4th		
	5th		

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-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:- Monalisa Barik	
Subject. Surveying -I	No. Of days / per week class allotted:-	Semester 4th from date: 14/03/22 To Date: 10/06/22 No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
CH-1 FIRST	1st 14/03/22	Introduction to surveying - Linear measurements :- Surveying :- Definition, Aims, and objectives.	
	2nd 15/03/22	principles of Survey - Plane Surveying - Geodetic Surveying - Instrumental Surveying.	
	3rd 17/03/22	Precision and accuracy of measurements Instruments used for measurement of distance, Types of tape and chain).	
	4th 17/03/22	Errors and Mistakes in linear measurement - classification, sources of errors and remedies.	
	5th 21/03/22	Correction to measured lengths due to incorrect length, temperature, variation, Pull, Sag.	
SECOND CH-2	1st 21/03/22	Numerical problem applying correction.	
	2nd 22/03/22	Numerical Problem.	
	3rd 22/03/22	Chaining and chain surveying :- Equipment and accessories for chaining.	
	4th 24/03/22	Ranging - Purpose, signaling, direct and indirect ranging, Line ranger - features and use. / Error due to incorrecting ranging.	
	5th 24/03/22	Method of chaining - Chaining on flat ground, chaining on sloping ground - stepping method, Clinometer - features and use, Slope correction.	
THIRD	1st 25/03/22	Setting perpendicular with chain and tape - Chaining across different types of obstacles.	
	2nd 25/03/22	Numerical problems on chaining across obstacles.	
	3rd 26/03/22	Numerical problems.	
	4th 28/03/22	Purpose of chain surveying, its principles, concept of field book, selection of surveying station & base, Ranging the lines, checking.	
	5th 28/03/22	offsets - Necessity, Perpendicular and oblique offsets. Instruments for setting offset - cross staff, optical square.	
FORTH CH-3	1st 29/03/22	Errors in chain surveying - compensating and accumulative errors & causes and remedies, Precaution to be taken during chain surveying.	
	2nd 29/03/22	Angular measurement and compas surveying :- Measurement of angles with chain, tape and compass.	
	3rd 31/03/22	Compass - types, features, parts, Merits and demerits testing and adjustment of compass.	
	4th 31/03/22	Designation of angles - concept of meridians - Magnetic, true, arbitrary, concept of bearing - whole circle bearing, Quadrantal bearing, Reduce bearing, Suitable application.	
	5th 2/04/22	Numerical Problems on conversion of bearings.	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 02/04/22	use of compasses - setting in field - centering, levelling taking readings / concepts of fore bearing, Back bearings.	
	2nd 04/04/22	Numerical problems on computation of interior and exterior angles from bearings.	
	3rd 04/04/22	Effects of earth's Magnetism dip of needle, Magnetic declination, variation in declination.	
	4th 5/04/22	Numerical Problems on application of correction for declination.	
	5th 07/04/22	Errors in angle measurement with compass - Sources and remedies.	
SECOND	1st 07/04/22	Principles of traversing - open and closed traverse. Methods of traversing.	
	2nd 08/04/22	Local attraction - causes, detection, errors, correction	
	3rd 08/04/22	Numerical Problems of application of correction due to local attraction.	
	4th 09/04/22	Errors in compass surveying - Sources and remedies Plotting of traverse, check of closing error, balancing by	
	5th 09/04/22	study of direction, scale, grid reference and grid square study of signs and symbols.	
THIRD CH-5	1st 11/04/22	Cadastral map preparation Methodology. unique identification number of parcels.	
	2nd 11/04/22	position of existing control point and its types - adjacent boundaries and features/topology.	
	3rd 12/04/22	Plane table surveying:- objectives, Principles and use of Plane table Survey	
	4th 12/04/22	Instruments and accessories used in Plane table surveying.	
	5th 16/04/22	Methods of Plane table surveying - (a) Radiation (b) Intersection (c) Traversing (d) Resection.	
FORTH CH-6	1st 18/04/22	Statement of two point and three point Problem.	
	2nd 18/04/22	Error in Plane table surveying. their correction, Precaution in Plane table Surveying.	
	3rd 19/04/22	theodolite Surveying and traversing:- Purpose and definition of theodolite surveying,	
	4th 21/04/22	Transit theodolite - Description of features, components Basic fundamental axes of a theodolite, concept of vernier reading vernier, temporary adjustment of theodolite.	
	5th 21/04/22	Concept of transiting - measurement of horizontal and vertical angle.	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 22/04/22	Measurement of magnetic bearings, deflection direct angle - setting out angles prolongation of straight line with theodolite, errors in theodolite observations.	
	2nd 23/04/22	Methods of theodolite traversing with - included angle method, deflection angle method bearing method, plotting the traverse by coordinate method,	
	3rd 25/04/22	checks for open and closed traverse, Traverse - computation consecutive coordinates, latitude and departure, gales traverse table.	
	4th 26/04/22	Numerical problems on omitted measurement of length and bearing.	
	5th 28/04/22	Closing error. - adjustment of angular error adjustment of bearing.	
SECOND	1st 29/04/22	Numerical problems.	
	2nd 30/04/22	Balancing of traverse - Bowditch method, trans't method, graphical method, axis method.	
	3rd 02/05/22	Calculation of area of closed traverse.	
	4th 05/05/22	Levelling and contouring' - Definition and purpose and types of leveling.	
	5th 06/05/22	Concepts of level surface horizontal surface, vertical surface, datum, R.L, B.M.	
THIRD	1st 07/05/22	Instruments used for levelling, concepts of line of collimation, axis of bubble tube, axis of telescope, vertical axis.	
	2nd 9/05/22	Levelling staff - Temporary adjustments of level, taking reading with level, concept of bench mark.	
	3rd 10/05/22	Field data entry - level book - height of collimation method and Rise fall both method.	
	4th 12/05/22	Numerical problems on reduction of levels applying both methods, arithmatic checks.	
	5th 13/05/22	Effects of curvature and refraction, numerical Problems on application of - correction.	
FORTH	1st 14/05/22	Reciprocal levelling - principles, methods, numerical Problems & precise levelling.	
	2nd 17/05/22	Errors in levelling precautions, permanent and temporary adjustment of different types of levels.	
	3rd 21/05/22	Definition, concept and characteristics of contour.	
	4th 23/05/22	Methods of contouring, Plotting contour maps, interpretation of contour map to Posheets.	
	5th 24/05/22	Use of contour maps of civil engineering projects drawing cross - sections from contour maps.	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 26/05/22	Computation of volume of earthwork from Contour map for simple structure.	
	2nd 27/05/22	Map interpretation : interrelat human and economic activities, interpret physical landform.	
	3rd 28/05/22	Problem solving and Decision making.	
Ch-8	4th 31/05/22	Computation of area and volume :-	
	5th 02/06/22	Determination of areas, computation of areas from Plans. Calculation of area by using ordinate rule, trapezoidal rule, Simpson's rule.	
SECOND	1st 03/06/22	Calculation of volumes by prismoidal formula and trapezodal formula.	
	2nd 04/06/22	Prismoidal correction curvature correction for volume.	
	3rd 06/06/22	Revision	
	4th 06/06/22	Revision	
	5th 07/06/22	Doubt clearing class	
THIRD	1st 07/06/22	Revision	
	2nd 10/06/22	Revision	
	3rd 10/06/22	Doubt clearing class	
	4th 11/06/22	Revision	
	5th 12/06/22.	Revision.	
FORTH	1st		
	2nd		
	3rd		
	4th		
	5th		

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-:LESSON PLAN:-

cipline	Semester	Name of the teaching faculty:- Annapurna Mallick.	
t. TE	No. Of days / per week class allotted:-	Semester 4th from date: 14/03/22 To Date: 10/06/22 No. Of weeks:-	
ek	Class day	Theory/ Practical Topics :	
ST	1st 14/03/22	HYDROSTATICS:- Properties of fluid: Density Specific gravity, Surface tension, capillarity.	
	2nd 15/03/22	Numerical Problem	
	3rd 16/03/22	Pressure & it's measurement: intensity of Pressure atmospheric Pressure.	
	4th 21/03/22	Gauge Pressure	
	5th 21/03/22	Absolute Pressure.	
ECOND	1st 22/03/22	vaccume Pressure.	
	2nd 22/03/22	Relationship bet^n atmospheric Pressure	
	3rd 23/03/22	Absolute Pressure	
	4th 23/03/22	Gauge. Pressure.	
	5th 25/03/22	Pressure, head, Pressure gauge	
THIRD	1st 26/03/22	Pressure exerted on an immersed surface- total Pressure, Resultant Pressure.	
	2nd 28/03/22	Expression for total Pressure exerted on horizontal & vertical Surface.	
	3rd 29/03/22	Kinematic of fluid flow:- Basic equation of Fluid flow & their appn:- Rate of discharge	
	4th 30/03/22	Continuity of liquid flow	
	5th 30/03/22	Total energy of a liquid in motion; Potential Kinetic & Pressure, Bernoulli's theorem & its limitation	
FORTH	1st 02/04/22	Practical application of Bernoulli's eq^n.	
	2nd 04/04/22	flow over notches & weirs - Notches - weirs & types of notches weirs discharge through diff^t types of	
	3rd 05/04/22	Weirs their application (Calo derivation)	
	4th 06/04/22	Types of flow through the pipes- uniform non uniform	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-
Week	Class day.	Theory/ Practical Topics :
FIRST	1st 08/04/22	Laminar & turbulent flow
	2nd 08/04/22	Steady & ~~Uns~~ unsteady flow
	3rd 09/04/22	Reynold's number & it's application
	4th 11/04/22	Losses of head of a liquid flowing through pipe. Different type of Major and minor losses.
	5th 12/04/22	Simple numerical problem on losses due to friction using Darcy's equation
SECOND	1st 13/04/22	Total energy lines & hydraulic Gradient lines
	2nd 16/04/22	Flow through the open channels:- Types of channel section - Rectangular,
	3rd 18/04/22	Trapezodial & circular.
	4th 18/04/22	Discharge formula - Chezy's equation
	5th 19/04/22	Manning's equation, Best economical Section Numerical problem,
THIRD	1st 19/04/22	Pumps:- Type of Pumps
	2nd 20/04/22	Centrifugal Pumps, Basic priniple.
	3rd 20/04/22	Operation, discharge, horse power & efficiency
	4th 22/04/22	~~Repa~~ Reciprocating Pumps:- Types, Operation
	5th 22/04/22	Discharge
ORTH	1st 23/04/22	Horse power & efficiency : Numerical prob.
	2nd 25/04/22	Hydrology:- Hydrology cycle, Rainfall, Types, intensity hydrograph.
	3rd 26/04/22	Estimation of rainfall, rainguage, it's types.
	4th 27/04/22	Concept of Catchment area, type, runoff Estimation of fuel discharge by Dicken's and Ryve's formula.
	5th 27/04/22	Water requirement of crops:- Def^n of irrigation necessity, benifits of irrigation, types of irrigation

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 02/05/22	Crop season, Duty, Delta, base period their relationship, overlap allowance, khariff, rabi crop	
	2nd 04/05/22	Gross command area, culturable command area, intensity of irrigation,	
	3rd 06/05/22	Irrigation area :- time factor, crop ratio	
	4th 07/05/22	flow irrigation : canal irrigation, type of canal loss of water in canals	
	5th 09/05/22	perennial Irrigation	
SECOND	1st 10/05/22	Different component of irrigation canals their function	
	2nd 11/05/22	Sketches of different canal cross-section	
	3rd 13/05/22	Classification of canals according to their alignment.	
	4th 14/05/22	Various types of Canal lining	
	5th 14/05/22	Advantages & disadvantages	
THIRD	1st 17/05/22	water logging & drainage: Cause & effect of water logging	
	2nd 17/05/22	Deterioration, prevention & remedies.	
	3rd 18/05/22	Diversion, headwork & regulatory structure. Necessity & objective of diversion headworks	
	4th 21/05/22	Weir & barrages	
	5th 21/05/22	General layout	
FORTH	1st 23/05/22	Function of different part of barrage	
	2nd 23/05/22	Satory	
	3rd 24/05/22	& comming	
	4th 24/5/22	Function of Regulatory Structures	
	5th 25/05/22	Cross Drainage works :- Function & necessity of drainage works.	

-:LESSON PLAN:-

Discipline	Semester	Name of the teaching faculty:-	
Subject.	No. Of days / per week class allotted:-	Semester from date: To Date: No. Of weeks:-	
Week	Class day	Theory/ Practical Topics :	
FIRST	1st 27/05/22	Aqueduct	
	2nd 28/5/22	Syphon	
	3rd 31/05/22	Scupper passage.	
	4th 01/06/22	Level Crossing	
	5th 01/06/22	Concept of each with help of neat sketch	
SECOND	1st 03/06/22	DAMS:- Necessity of Storage reservoirs	
	2nd 04/06/22	Types of dams.	
	3rd 04/06/22	Earthen dam:- Types, description	
	4th 05/06/22	Causes of failure & protection Measure	
	5th 06/06/22	Spill way:- Types with sketch	
THIRD	1st 07/06/22	Necessity	
	2nd 08/06/22	Doubt Clearing Classes	
	3rd 10/06/22	Doubt Clearing classes.	
	4th		
	5th		
FORTH	1st		
	2nd		
	3rd		
	4th		
	5th		

Sanjay 14/05/2022

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