Discipline:**CIVIL**	Semester: 5th	Name of Teaching Faculty:-Jyotirmayee Sabar
Subject:- ESTIMATION & COST EVALUTION - 2	No of Days/Week Class alloted:- **04**	Semester from date: 01.**08.2023 to 30.11.2023** No of Weeks: **15**
Week	Claas Day	Theory Topics
1st	1st	**1.DETAILED ESTIMATE FOR CULVERT AND BRIDGES**: Concept
	2nd	1.1-Detailed estimate of a RCC slab culvert with right angled wing walls with bar bending schedule.
	3rd	RCC slab -Basic ,plan ,layout
	4th	RCC Slab BAR Bending schedule
2nd	1st	BBS - Numerical Problems
	2nd	BBS - Numerical Problems
	3rd	RCC Culvert-Detailed estimate with example
	4th	RCC Culvert-Detailed estimate with example(Contd.)
3rd	1st	RCC Culvert-Detailed estimate with example(Contd.)
	2nd	1.2-:RCC Hume pipe culvert with splayed angled wing wall
	3rd	RCC Hume pipe culvert with splayed angled wing wall-Numerical Problem
	4th	RCC Hume pipe culvert with splayed angled wing wall-Numerical Problem
4th	1st	**2.Estimate of irrigation structures**
	2nd	2.1-Detailed estimate of simple type of vertical fall to given specification.
	3rd	Detailed estimate of simple type of vertical fall to given specification-Numerical Problem
	4th	Detailed estimate of simple type of vertical fall to given specification-Numerical Problem
5th	1st	Detailed estimate of simple type of vertical fall to given specification-Numerical Problem
	2nd	Detailed estimate of simple type of vertical fall to given specification-Numerical Problem
	3rd	2.2-Detailed estimate of drainage siphon to given specification.
	4th	Detailed estimate of drainage siphon to given specification-Numerical Problem 1
6th	1st	Detailed estimate of drainage siphon to given specification-Numerical Problem 1

	2nd	Detailed estimate of drainage siphon to given specification- Numerical Problem 1
	3rd	Detailed estimate of drainage siphon to given specification- Numerical Problem 2
	4th	Detailed estimate of drainage siphon to given specification- Numerical Problem 2
7th	1st	Detailed estimate of drainage siphon to given specification- Numerical Problem 2
	2nd	Doubt clearing class
	3rd	**3.Detailed estimate of roads**
	4th	3.1-Detail estimate of a water bound macadam road
8th	1st	Detail estimate of a water bound macadam road
	2nd	Detail estimate of a water bound macadam road- Numerical Problem
	3rd	3.2-Detailed estimate of a flexible pavement in cutting / filling
	4th	Different Methods on Earthwork
9th	1st	Detailed estimate of a flexible pavement in cutting / filling- Numerical Problem
	2nd	Detailed estimate of a flexible pavement in cutting / filling- Numerical Problem
	3rd	3.3-Detailed estimate of septic tank and soak pit for 50 users
	4th	Detailed estimate of septic tank and soak pit for 50 users- Numerical Problem
10th	1st	Detailed estimate of septic tank and soak pit for 50 users- Numerical Problem
	2nd	Detailed estimate of septic tank and soak pit for 50 users- Numerical Problem
	3rd	**4.Miscellaneous estimates**
	4th	Detailed estimate- Tube well
11th	1st	Detailed estimate -Tube well
	2nd	Detailed estimate- Piles and Pile cap
	3rd	Detailed estimate- Piles and Pile cap
	4th	Detailed estimate- Piles and Pile cap
12th	1st	Detailed estimate- Piles and Pile cap
	2nd	Detailed estimate- Isolated Footings
	3rd	Detailed estimate- Isolated Footings
	4th	Detailed estimate- Isolated Footings
13th	1st	Detailed estimate- combined footings.

	2nd	Detailed estimate- combined footings.
	3rd	**5.PWD Accounts works**
	4th	5.1 Works
14th	1st	5.1.1 Classification of work-original, major, petty, repair work, annual repair,
	2nd	5.1.2 Concept of Method of execution of works through the contractors anddepartment, contract and agreement, work order, types of contract, piece work agreement.
	3rd	5.2 Accounts of works –Administrative approval, technical sanction, tender, preparation of notice inviting tender, quotations, earnest money, E-tendering, security deposit,
	4TH	advance payment, intermediate payment, final payment, running bill, final bill,regular and temporary establishment, cash, major & subhead of account, temporary advance (imprest money),supervision charges, suspenseaccount, debit, credit, book transfer, voucher and related accounts
15th	1st	5.2.2 Measurement book use & maintenance, procedure of marking entries of measurement of work and supply of materials, labour employed, standard measurement books and common irregularity
	2nd	5.2.3 Muster roll : Its preparation & use for making payment of pay & wages 5.2.3 Muster roll : Its preparation & use for making payment of pay & wages
	3rd	5.2.5 Labour & labour report, method of labour payment, use of forms and necessity of Submission 5.2.6 Classification of stores, receipt / issue statement on standard form, method of preparation of stock account, preparation and submission of returns,verification of stocks, shortage and excess
	4TH	5.3 Building BYLAWS and REGULATORY Bodies, Development authorities,types and their levels, RERA etc.

Rahat
24/07/2023

Discipline:CIVIL	Semester: 5TH	Name of Teaching Faculty:-TAPAS KUMAR MALLICK
Subject:-RAILWAY	No of Day4/Week Class alloted:- 04	Semester from date: 01.08.23 to 30.11.23 No of Weeks: 15
Week	Claas Day	THEORY
1st	1st RAILWAY	**INTRODUCTION** : Railway terminology
	2nd	Advantages of railways
	3rd	Classification of Indian Railways
	4th BRIDGE	**INTRODUCTION TO BRIDGES :** Definitions
2nd	1st RAILWAY	**PERMANENT WAY** : Definition and components of a permanent way
	2nd	Concept of gauge,
	3rd	different gauges prevalent in India
	4th BRIDGE	Components of a bridge
3rd	1st RAILWAY	suitability of these gauges under different conditions
	2nd	suitability of these gauges under different conditions
	3rd	suitability of these gauges under different conditions
	4th BRIDGE	Classification of bridges
4th	1st RAILWAY	**TRACK MATERIALS** : Rails
	2nd	Functions and requirement of rails
	3rd	Types of rail sections
	4th BRIDGE	Requirements of an ideal bridge
5th	1st RAILWAY	length of rails
	2nd	Rail joints – types
	3rd	requirement of an ideal joint
	4th BRIDGE	**BRIDGE INVESTIGATION , HYDROLOGY & PLANNING** : Selection of bridge site, Alignment,
6th	1st RAILWAY	Purpose of welding of rails & its advantages
	2nd	Creep- definition
	3rd	cause & prevention
	4th BRIDGE	Determination of Flood Discharge
7th	1st RAILWAY	Sleepers : Definition
	2nd	function & requirements of sleepers
	3rd	Classification of sleepers
	4th BRIDGE	Waterway & economic span
8th	1st RAILWAY	Advantages & disadvantages of different types of sleepers
	2nd	Ballast : Functions & requirements of ballast
	3rd	Materials for ballast
	4th BRIDGE	Afflux, clearance & free board
9th	1st RAILWAY	Fixtures for Broad gauge
	2nd	Connection of rails to rail-fishplate, fish bolts
	3rd	Connection of rails to sleepers
	4th BRIDGE	**BRIDGE FOUNDATION** : Scour depth minimum depth of foundation

10th	1st RAILWAY	**GEOMETRIC FOR BROAD GAUGE** : Typical cross – sections of single & double broad gauge railway track in cutting and embankment
	2nd	Permanent & temporary land width
	3rd	Permanent & temporary land width
	4th BRIDGE	Types of bridge foundations – spread foundation,
11th	1st RAILWAY	Permanent & temporary land width
	2nd	Gradients for drainage
	3rd	Gradients for drainage
	4th BRIDGE	pile foundation- well foundation – sinking of wells, caission foundation
12th	1st RAILWAY	Gradients for drainage
	2nd	Gradients for drainage
	3rd	Super elevation – necessity & limiting valued
	4th BRIDGE	**BRIDGE SUBSTRUCTURE AND APPROACHES** : Types of piers
13th	1st RAILWAY	**POINTS AND CROSSINGS** : Definition, necessity of Points and crossings
	2nd	Types of points
	3rd	crossings with tie diagrams
	4th BRIDGE	Types of abutments
14th	1st RAILWAY	**LAYING AND MAINTENANCE** : Methods of Laying
	2nd	maintenance of track
	3rd	Duties of a permanent way inspector
	4th BRIDGE	Types of wing walls
15th	1st BRIDGE	Approaches
	2nd	**CULVERT AND CAUSE WAYS**: Types of culvers – brief description
	3rd	Types of causeways – brief description
	4th BRIDGE	REVISION

31/7/23

LESSON PLAN OF 5TH SEMESTER CIVIL ENGINEERING

Discipline :- CIVIL	Semester:- 5TH	Name of the Teaching Faculty:- SWAYAN RANJAN MISRA
Subject:- Structural Design-2	No of Days/per Week Class Allotted :- 04	Semester From:- **01.08.2023 TO 30.11.2023** No of Weeks:- **15**

Week	Class Day	Theory Topics
1st	1st	**Introduction** Common steel structures, Advantages & disadvantages of steel structures
	2nd	Types of steel, properties of structural steel.
	3rd	Rolled steel sections, special considerations in steel design.
	4th	Structural analysis and design philosophy.
2nd	1st	Loads and load combinations, Brief review of Principles of Limit State design.
	2nd	**Structural Steel Fasteners and Connections** Bolted Connections Classification of bolts, advantages and disadvantages of bolted connections
	3rd	Different terminology, spacing and edge distance of bolt holes.
	4th	Types of bolted connections. Types of action of fasteners, assumptions and principles of design.
3rd	1st	Strength of plates in a joint, strength of bearing type bolts (shear capacity& Bearing capacity), reduction factors, and shear capacity of HSFG bolts with example problem.
	2nd	Analysis & design of Joints using bearing type and HSFG bolts
	3rd	Efficiency of a joint
	4th	Welded Connections: Advantages and Disadvantages of welded connection
4th	1st	Types of welded joints and specifications for welding
	2nd	Design stresses in welds.
	3rd	Strength of welded joints.
	4th	Numerical problem on welded connection
5th	1st	**Design of Steel tension Members** Common shapes of tension members
	2nd	Common shapes of tension members
	3rd	Analysis and Design of tension members
	4th	Gross Strength of Tension Member
6th	1st	Net Strength of Tension Member
	2nd	Block Shear Strength of Tension Member
	3rd	Numerical Problem on Tension Member
	4th	Numerical Problem on Tension Member
7th	1st	Numerical Problem on Tension Member
	2nd	Lug angle
	3rd	**Design of Steel Compression members** Common shapes of compression members.
	4th	Buckling class of cross sections
8th	1st	slenderness ratio
	2nd	Design compressive stress and strength of compression members.

	3rd	Design compressive stress and strength of compression members.
	4th	Analysis and Design of compression members
	1st	Analysis and Design of compression members
	2nd	Numerical problem solving
	3rd	Numerical problem solving
	4th	Numerical problem solving
10th	1st	**Design of Steel beams:** Common cross sections and their classification.
	2nd	Common cross sections and their classification.
	3rd	Deflection limits According To IS-800
	4th	web buckling and web crippling.
11th	1st	Design of laterally supported beams against bending and shear.
	2nd	Design of laterally supported beams against bending and shear.
	3rd	Design of laterally supported beams against bending and shear.
	4th	Numerical Problem solving
12th	1st	Numerical Problem solving
	2nd	Numerical Problem solving
	3rd	**Design of Tubular Steel Structures:** Round Tubular Section
	4th	Permissible Stresses
13th	1st	Tubular Compression & Tension Members
	2nd	Joints in Tubular trusses
	3rd	Numerical Problem
	4th	Numerical Problem
14th	1st	**Design of Masonry Structures:** Design considerations for Masonry walls & Columns
	2nd	Design considerations for Masonry walls & Columns
	3rd	Load Bearing & Non-Load Bearing walls
	4th	Permissible stresses, Slenderness Ratio
15th	1st	Effective Length, Height & Thickness.
	2nd	Numerical Problem
	3rd	Numerical Problem
	4th	Numerical Problem

31/07/23

Signature of the concerned Lecturer

Signature of the H.O.D

LESSON PLAN

DISCIPLINE	SEMESTER 5TH Sem.	Name of the Teaching Faculty: Tapas Ranjan Mishra
Sub: WS&WWE Th.4	No. of Days Per Week: 5 Class Allotted	Semester From Date: 01/08/2023 To Date: 30/11/2023 No. of Weeks: 15 Weeks
Week	Class Day	Theory/Practical Topic
1st	1	Necessity of treated water supply
	2	Per capita demand, variation in demand and factors affecting demand
	3	Methods of forecasting population, Numerical problems using different methods
	4	Impurities in water – organic and inorganic, Harmful effects of impurities
	5	Analysis of water –physical, chemical and bacteriological
2nd	1	Water quality standards for different uses
	2	Surface sources – Lake, stream, river and impounded reservoir
	3	Underground sources – aquifer type & occurrence – Infiltration gallery, infiltration well, springs, well
	4	Underground sources – aquifer type & occurrence – Infiltration gallery, infiltration well, springs, well
	5	Yield from well- method s of determination, Numerical problems using yield formulae (deduction excluded)
3rd	1	Yield from well- method s of determination, Numerical problems using yield formulae (deduction excluded)
	2	Intakes – types, description of river intake, reservoir intake, canal intake
	3	Pumps for conveyance & distribution – types, selection, installation.
	4	Pipe materials – necessity, suitability, merits & demerits of each type
	5	Pipe joints – necessity, types of joints, suitability, methods of jointing Laying of pipes – method
4th	1	Flow diagram of conventional water treatment system
	2	Treatment process / units : Aeration ; Necessity Plain Sedimentation : Necessity, working principles, Sedimentation tanks – types, essential features, operation & maintenance
	3	Treatment process / units : Aeration ; Necessity Plain Sedimentation : Necessity, working principles, Sedimentation tanks – types, essential features, operation & maintenance
	4	Treatment process / units : Aeration ; Necessity Plain Sedimentation : Necessity, working principles, Sedimentation tanks – types, essential features, operation & maintenance
	5	Sedimentation with coagulation: Necessity, principles of coagulation, types of coagulants, Flash Mixer, Flocculator, Clarifier (Definition and concept only)
5th	1	Sedimentation with coagulation: Necessity, principles of coagulation, types of coagulants, Flash Mixer, Flocculator, Clarifier (Definition and concept only)
	2	Filtration : Necessity, principles, types of filters Slow Sand Filter, Rapid Sand Filter and Pressure Filter – essential features
	3	Filtration : Necessity, principles, types of filters Slow Sand Filter, Rapid Sand Filter and Pressure Filter – essential features
	4	Disinfection : Necessity, methods of disinfection Chlorination – free and combined chlorine demand, available chlorine, residual chlorine, pre-chlorination, break point chlorination, super-chlorination
	5	Disinfection : Necessity, methods of disinfection Chlorination – free and combined chlorine demand, available chlorine, residual chlorine, pre-chlorination, break point chlorination, super-chlorination
6th	1	Softening of water – Necessity, Methods of softening – Lime soda process and Ion exchange method (Concept Only)
	2	General requirements, types of distribution system-gravity, direct and

		combined
	3	Methods of supply – intermittent and continuous
	4	Distribution system layout – types, comparison, suitability
	5	Valves-types, features, uses, purpose-sluice valves, check valves, air valves, scour valves, Fire hydrants, Water meters
7th	1	Valves-types, features, uses, purpose-sluice valves, check valves, air valves, scour valves, Fire hydrants, Water meters
	2	Method of connection from water mains to building supply
	3	General layout of plumbing arrangement for water supply in single storied and multi-storied building as per I.S. code.
	4	General layout of plumbing arrangement for water supply in single storied and multi-storied building as per I.S. code.
	5	Aims and objectives of sanitary engineering
8th	1	Definition of terms related to sanitary engineering
	2	Systems of collection of wastes– Conservancy and Water Carriage System – features, comparison, suitability
	3	Quantity of sanitary sewage – domestic & industrial sewage, variation in sewage flow, numerical problem on computation quantity of sanitary sewage.
	4	Quantity of sanitary sewage – domestic & industrial sewage, variation in sewage flow, numerical problem on computation quantity of sanitary sewage.
	5	Quantity of sanitary sewage – domestic & industrial sewage, variation in sewage flow, numerical problem on computation quantity of sanitary sewage.
9th	1	Quantity of sanitary sewage – domestic & industrial sewage, variation in sewage flow, numerical problem on computation quantity of sanitary sewage.
	2	Computation of size of sewer, application of Chazy's formula, Limiting velocities of flow : self-cleaning and scouring
	3	Computation of size of sewer, application of Chazy's formula, Limiting velocities of flow : self-cleaning and scouring
	4	General importance, strength of sewage, Characteristics of sewage-physical, chemical & biological
	5	General importance, strength of sewage, Characteristics of sewage-physical, chemical & biological
10th	1	Concept of sewage-sampling, tests for – solids, pH, dissolved oxygen, BOD, COD
	2	Concept of sewage-sampling, tests for – solids, pH, dissolved oxygen, BOD, COD
	3	Concept of sewage-sampling, tests for – solids, pH, dissolved oxygen, BOD, COD
	4	Types of system-separate, combined, partially separate , features, comparison between the types, suitability
	5	Types of system-separate, combined, partially separate , features, comparison between the types, suitability
11th	1	Types of system-separate, combined, partially separate , features, comparison between the types, suitability
	2	Shapes of sewer – rectangular, circular, avoid-features, suitability
	3	Laying of sewer-setting out sewer alignment
	4	Manholes and Lamp holes – types, features, location, function
	5	Inlets, Grease & oil trap – features, location, function
12th	1	Storm regulator, inverted siphon – features, location, function
	2	Disposal on land – sewage farming, sewage application and dosing, sewage sickness-causes and remedies
	3	Disposal on land – sewage farming, sewage application and dosing, sewage sickness-causes and remedies
	4	Disposal by dilution – standards for disposal in different types of water bodies, self purification of stream
	5	Disposal by dilution – standards for disposal in different types of water bodies, self purification of stream
13th	1	Disposal by dilution – standards for disposal in different types of water bodies, self purification of stream
	2	Principles of treatment, flow diagram of conventional treatment
	3	Primary treatment – necessity, principles, essential features, functions
	4	Secondary treatment – necessity, principles, essential features, functions

	5	Requirements of building drainage, layout of lavatory blocks in residential buildings, layout of building drainage
14th	1	Requirements of building drainage, layout of lavatory blocks in residential buildings, layout of building drainage
	2	Requirements of building drainage, layout of lavatory blocks in residential buildings, layout of building drainage
	3	Plumbing arrangement of single storied & multi storied building as per I.S. code practice
	4	Plumbing arrangement of single storied & multi storied building as per I.S. code practice
	5	Plumbing arrangement of single storied & multi storied building as per I.S. code practice
15th	1	Sanitary fixtures – features, function, and maintenance and fixing of the fixtures – water closets, flushing cisterns, urinals, inspection chambers, traps. anti-syphonage pipe
	2	Sanitary fixtures – features, function, and maintenance and fixing of the fixtures – water closets, flushing cisterns, urinals, inspection chambers, traps. anti-syphonage pipe
	3	Sanitary fixtures – features, function, and maintenance and fixing of the fixtures – water closets, flushing cisterns, urinals, inspection chambers, traps. anti-syphonage pipe
	4	Sanitary fixtures – features, function, and maintenance and fixing of the fixtures – water closets, flushing cisterns, urinals, inspection chambers, traps. anti-syphonage pipe
	5	Sanitary fixtures – features, function, and maintenance and fixing of the fixtures – water closets, flushing cisterns, urinals, inspection chambers, traps. anti-syphonage pipe

11/8/23

LESSION PLAN

Discipline:	Semester:5th sem.	Name Of The Faculty : Chinmayee Sunani
Subject:**Building Material & Construction Tecghnology**	No. Of Day /per week: 5 class allotted.	Semester From date : 01.08.2023 To Date: 30/11/2023 No of weeks:15 weeks
Week	Class Day	Theory/practical Topics
1st	1st	STONE : Classification of rock , uses of stone ,natural bed of stone
	2nd	Quality of good building stone
	3rd	Dressing of stone
	4th	Characteristics of different types of stone and their uses
	5th	BRICK: Brick earth -its composition
2nd	1st	Brick making -preparation of brick earth ,moulding drying ,Burning in kilns
	2nd	Classification of brick , size of traditional and modular bricks , qualities of good building bricks
	3rd	Cement mortar and concrete:cement types of cement , properties vof cement ,manufactyuring of cement
	4th	important and application of blended cement with fly ash and blast furnace slag
	5th	Mortar :defination and types of mortar
3rd	1st	sourses and classification of sand , bukling opf sand
	2nd	Use of gravel , morrum and fly ash as different building material
	3rd	Concrete : defination and composition - water cement ratio - workability , mecanical properties and grading of aggregate , mixing ,placing , compacting and curing of concrete.
	4th	OTHER CONSTRUCTION MATERIALS :Timber :classification and structure of timber
	5th	seasoning of timber importance
4th	1st	Characteristics of goood timber
	2nd	Clay product and refractory materials - Defination and classification
	3rd	properties and uses of refractory materials - tiles ,terracotta,porcelains glazing
	4th	Iron and steel :use of cast ,wrought iron ,mild steel and tor steel
	5th	SURFACE PROTECTIVE MATERIALS:composition of paints ,enamels ,vernishes.
5th	1st	
	2nd	types and uses of surface protective materials like paints ,enamels ,vernishes ,distempers ,emulsion ,french polish and wax polish.
	3rd	types and uses of surface protective materials like paints ,enamels ,vernishes ,distempers ,emulsion ,french polish and wax polish.
	4th	CONSTRUCTION TECNOLOGY: introduction : building and classification of building based on occupancy
	5th	Different component of building
6th	1st	site investigation - objectives, site reconnaissance and explorations.
	2nd	foundation : concept of foundation and its purpose
	3rd	shallow foundation details of ; spread foundation for walls, thumd rules for depth and width of foundation and thickness of concrete block
	4th	Deep foundation :pile foundation -their suitability ,classification of piles based on materials , function and method of installation.
	5th	WALLS & MASONARY WORKS:PURPOSE OF WALLS
7th	1st	classification of walls -load bearing ,non load bearing walls ,retaining walls
	2nd	classification of walls as per materials of construction :brick , stone ,reinforcement brick ,reinforced concrete ,precrete , precast ,hollow and solid concrete block and composite masonary walls
	3rd	classification of walls as per materials of construction :brick , stone ,reinforcement brick ,reinforced concrete ,precrete , precast ,hollow and solid concrete block and composite masonary walls
	4th	partition walls :suitability and uses of brick and wooden partition walls
	5th	brick masonary: DIFFERENT TERMS
8th	1st	Bond - meaning and necessary : english bond for 1 and 1-1/2 brick walls ,T, X and right angaled corner juction s.Thickness for 1 and 1/2 brick square pillars in english bond
	2nd	Stone masonary
	3rd	Glossary of terms - string course ,corbel ,cornice ,block -in-course ,grouting ,moulding ,templates ,throating, through stones ,parapet ,coping ,pilaster and buttress
	4th	DOORS , WINDOWS AND LINTELS :Glossary of terms used in doors and windows
	5th	doors - different types of doors
9th	1st	windows - different types of windows
	2nd	purpose of use of arches and lintels
	3rd	FLOORS , ROOFS AND STAIRS :FLOORS:glossary of terms ,types of floors finishes -cast in situ ,concrete flooring ,terrazo tile flooring ,cast in situ terrazzo flooring, timberflooring
	4th	Roofs :glossary of terms ;stair case ,winder ,landing ,strings , newels ,bluster ,rise ,tread ,width of stair case hand nail ,nosing head room ,mumty room.
	5th	Stairs :glossary of terms ;stairs case ,winder ,landing ,stringer ,newel ,baluster,rise ,tread,width of stair case ,hand rails ,nosing ,head room,mumty room
10th	1st	various type of stair case - straight flight ,dog legged ,open well ,quater turn ,half turn ,bifurcated stair, spiral stairs ,tread riser stair.
	2nd	various type of stair case - straight flight ,dog legged ,open well ,quater turn ,half turn ,bifurcated stair, spiral stairs ,tread riser stair.

	3rd	PROTECTIVE ,DECORATIVE ,FINISHES ,DAMP AND TERMITE PROOFING: PLASTERING - purpose - types of plastering ,types of plaster finishes -Grit finishes rough cast ,smooth ncast sand faced pebble dash ,acoustic plastering and plain p0laster etc
	4th	PROTECTIVE ,DECORATIVE ,FINISHES ,DAMP AND TERMITE PROOFING: PLASTERING - purpose - types of plastering ,types of plaster finishes -Grit finishes rough cast ,smooth ncast sand faced pebble dash ,acoustic plastering and plain p0laster etc
	5th	PROTECTIVE ,DECORATIVE ,FINISHES ,DAMP AND TERMITE PROOFING: PLASTERING - purpose - types of plastering ,types of plaster finishes -Grit finishes rough cast ,smooth ncast sand faced pebble dash ,acoustic plastering and plain p0laster etc
11th	1st	PROTECTIVE ,DECORATIVE ,FINISHES ,DAMP AND TERMITE PROOFING: PLASTERING - purpose - types of plastering ,types of plaster finishes -Grit finishes rough cast ,smooth ncast sand faced pebble dash ,acoustic plastering and plain p0laster etc
	2nd	propertion of mortars used for different plasters ,preparation of mortars ,techniquies of plastering curing
	3rd	pointing - purpose -types of ponting
	4th	painting - objective -method of painting new and old walls surfacees ,wood surface and metal surfaces - power coating and spay painting on metal surfaces
	5th	painting - objective -method of painting new and old walls surfacees ,wood surface and metal surfaces - power coating and spay painting on metal surfaces
12th	1st	white washing- colour washing - distempering - internal and external walls
	2nd	white washing- colour washing - distempering - internal and external walls
	3rd	white washing- colour washing - distempering - internal and external walls
	4th	Damp and termite proofing - materials and methods
	5th	Damp and termite proofing - materials and methods
13th	1st	Damp and termite proofing - materials and methods
	2nd	concept of green building
	3rd	concept of green building
	4th	concept of green building
	5th	introduction to energy management and enargy audit of building
14th	1st	introduction to energy management and enargy audit of building
	2nd	introduction to energy management and enargy audit of building
	3rd	Aims of energy management ofbuildings
	4th	Aims of energy management ofbuildings
	5th	Aims of energy management ofbuildings
15th	1st	types of enargy audit , response enargy audit questionnarire
	2nd	types of enargy audit , response enargy audit questionnarire
	3rd	enargy surveying and audit report
	4th	enargy surveying and audit report
	5th	enargy surveying and audit report

1/8/23

LESSION PLAN

Discipline:	Semester:5th sem.	Name of the Teaching Faculty: Chinmayee Sunani
Subject: **Entrepreneurship Mnagement & Smart Technology**	No. Of Day /per week: 4 class allotted.	Semester From date : 01.08.2023 To Date: 30/11/2023 No of weeks:15 weeks
Week	Class Day	Theory/practical Topics
1st	1st	ENTREPRENEURSHIP: Concept /meaning of entrepreneurship
	2nd	Need of entrepreneurship
	3rd	Characteristics , qualities and types of entrepreneur , functions
	4th	Barriers in entrepreneurship
2nd	1st	Entrepreneur vrs.Manager
	2nd	forms of bussiness ownership : sole proprietorship , partnership forms and others
	3rd	Types of industries , concept of start ups
	4th	Entrepreneurial support agencies at national, state ,district level: DIC,NSIC ,OSIC, SIDBI,NABARD ,commersial bank ,KVIC etc
3rd	1st	technology business incubators (TBI) and science and technology entrepreneur park
	2nd	MARKET SURVEY AND OPPORTUNITY INDENTIFICATION 9BUSINESS PLANNING): -Bussiness planning
	3rd	ssi ,ancillary units , tiny units ,service sector units
	4th	time schedule plan , agencies to be contacted for project implementation
4th	1st	Assessment of demand and supply and potential areas of growth
	2nd	Identifying business opportunity
	3rd	final product selection
	4th	PROJECT REPORT PREPARATION: Defination of managment
5th	1st	principle of management
	2nd	function of management
	3rd	Level of management in an organisation
	4th	FUNCTION AREAS AND OF MANAGEMENT : PRODUCTION MANAGEMENT :function ,activities & productivity
6th	1st	quality control ,production planning and control
	2nd	INVENTORY MANAGEMENT:need for inventory management,models /techniques of inventory management
	3rd	Financial management : function of financial management : function of financial management,management of working capital,coasting,break even enelysis
	4th	brief idea about according terminologies : book keeping , journals entry petty cash book , P & L ACCOUNTS, Balances sheets
7th	1st	brief idea about according terminologies : book keeping , journals entry petty cash book , P & L ACCOUNTS,
	2nd	marketing management : concept of marketing marketing management KET SURVEY AND OPPORTUNITY INDENTIFICATION 9BUSINESS PLANNING): -Bussiness planning
	3rd	concept of 4p s,maketing techniquies
	4th	human reasource management ,function of personal manage manent
8th	1st	man power planning ,requirment ,sources of man power, selection process ,methods of testing methods of training & development ,payment of wages
	2nd	LEADERSHIP &MOTIVATION : LEADERSHIP: defination need /importance
	3rd	qualities and function of a leader
	4th	importance of motivation
9th	1st	factors affecting motivation
	2nd	theorities of motivation
	3rd	method of improving motivation
	4th	importance of communication in bussiness
10th	1st	types and barriers of communications inbussiness
	2nd	WORK ,CULTURE ,TQM & SAFETY: human relationship and performance in organization
	3rd	WORK ,CULTURE ,TQM & SAFETY: human relationship and performance in organization
	4th	relationships with peers ,superiors and sub ordinatets
11th	1st	relationships with peers ,superiors and sub ordinatets
	2nd	TQM concepts : qualities policy ,quality management ,quality system
	3rd	TQM concepts : qualities policy ,quality management ,quality system
	4th	Accident and safety , causes ,preventatives ,measures general safety ,rural personal protection equipment
12th	1st	Accident and safety , causes ,preventatives ,measures general safety ,rural personal protection equipment
	2nd	Accident and safety , causes ,preventatives ,measures general safety ,rural personal protection equipment
	3rd	legislations : intellecutual property , patents ,trade mark , copy right
	4th	legislations : intellecutual property , patents ,trade mark , copy right
13th	1st	legislations : intellecutual property , patents ,trade mark , copy right
	2nd	feactures of factories act 1948 with amendenment
	3rd	feactures of factories act 1948 with amendenment
	4th	feactures of factories act 1948 with amendenment

	1st	feactures of payment of wages act 1936 (only silents point)
	2nd	feactures of payment of wages act 1936 (only silents point)
	3rd	feactures of payment of wages act 1936 (only silents point)
	4th	SMART TECHNOLOGY : Concept of IOT ,how IOT works
	1st	SMART TECHNOLOGY : Concept of IOT ,how IOT works
	2nd	SMART TECHNOLOGY : Concept of IOT ,how IOT works
	3rd	component of IOT,characteristics of IOT ,categories of IOT
	4th	applictions of IOT -smart cities ,smart aggriculture , smart enargy management etc.

1/8/23