


LESSON PLAN OF 3RD SEMESTER(2024-25)CIVILENGINEERING


Discipline: CIVIL ENGG.	Semester:-3 RD	Name of the Teaching Faculty JAYALAXMI BEHERA (LECTURER)
Subject:- BM&CT (Th.3)	No of Days/per Week Class Allotted :-04	Semester From:- <u>01/07/2024</u> To:- <u>08/11/2024</u> No of Weeks:-15
Week	Class Day	Theory/PracticalTopics
1 st	1 st	Classification of rock, uses of stone, natural bed of stone,
	2 nd	Qualities of good building stone,
	3 rd	Dressing of stone
	4 th	Characteristics of different types of stone and their uses
2 nd	1 st	Brick earth—its composition
	2 nd	Brick making—Preparation of brick earth,Moulding,Drying,Burningin kilns (continuous Process)
	3 rd	Brick making—Preparation of brick earth,Moulding,Drying,Burningin kilns (continuous Process)
	4 th	Classification of bricks,size of traditional and modular bricks,qualities of good building bricks
3 rd	1 st	Cement:Types of cements,Properties of cements,Manufacturing of cement
	2 nd	Importance and application of blended cement with flyash and blast furnace slag. Mortar:Definition and types of mortar
	3 rd	Sources and classification of sand, Bulking of sand Use of gravel,morrum and flyash as different building material
	4 th	Concrete:Definition and composition-Water cement ratio-Workability, Mechanical properties and grading of aggregates,mixing,placing, compacting and curing of concrete.
4 th	1 st	Timber:Classification and Structure of timber. Seasoning of timber—Importance. Characteristics of good timber.
	2 nd	Clay product sand refractory materials—Definition and Classification.
	3 rd	Properties and uses of refractory materials-tiles,terracotta,porcelain glazing.
	4 th	Iron and Steel:Uses of castiron,wroughtiron,mildsteelandtorsteel
5 th	1 st	Composition of Paints,enamels,varnishes.
	2 nd	Composition of Paints,enamels,varnishes.
	3 rd	Types and uses of surface protective materials like Paints,Enamels,
	4 th	Varnishes,Distempers,Emulsion,Frenchpolish and WaxPolish
6 th	1 st	Building sand classification of buildings based on occupancy
	2 nd	Buildingsandclassificationofbuildingsbasedonoccupancy
	3 rd	Different components of a building.
	4 th	Site investigation—objectives,site reconnaissance and explorations.
7 th	1 st	Concept of foundation and its purpose
	2 nd	Types of foundations— shallow and deep
	3 rd	Shallow foundation-constructional details of:Spread foundations for walls, thumb rules for depth and width of foundation and thickness of concrete block

	4th	Deep foundations:Pile foundations-their suitability,classification of piles based on materials, function and method of installation.
8th	1st	Purpose of walls
	2nd	Classification of walls-load bearing,non-load bearing walls,retaining
	3rd	Classification of walls as per materials of construction:brick,stone, Reinforced brick,reinforced concrete,precast,hollow and solid concrete block and composite masonry walls (Concept Only).
	4th	Classification of walls as per materials of construction:brick, stone, reinforced brick,reinforced concrete,precast,hollow and solid concrete block and composite masonry walls (Concept Only).
9th	1st	Partition Walls:Suitability and uses of brick and wooden partition walls Brick masonry:Definition of different terms
	2nd	Bond -meaning and necessity: English bond for 1 and 1-1/2 Brick thick walls. T,X and right angled corner junctions.Thickness for 1 and 1-1/2 brick square pillars in English bond
	3rd	Stone Masonry:
	4th	Glossary of terms-String course,corbel,cornice,block-in-course, grouting,mouldings,templates,throating,throughstones,parapet,coping, pilaster and buttress
10th	1st	Glossary of terms used in doors and windows
	2nd	Doors- different types of doors
	3rd	Windows-different types of windows
	4th	Purpose of use of arches and lintels
11th	1st	Floors:Glossary of terms,Types of floor finishes -cast-in-situ,concrete flooring (monolithic, bonded),
	2nd	Floors: terrazzo tile flooring,cast in situ Terrazzo flooring,timber flooring (Concept only)
	3rd	Roofs:Glossary of terms,Types of roofs,
	4th	Roofs:concept and function of flat,pitched,hipped and Sloped roofs
12th	1st	Stairs:Glossary of terms;Staircase,winder,landing,
	2nd	stringer,newel,baluster,rise,tread,
	3rd	Stairs:width of staircase,handrail,nosing
	4th	Stairs:headroom,mummy room.
13th	1st	Various types of staircase -straight flight,doglegged,openwell, quarter turn, half turn (newel and geometrical stairs),
	2nd	Bifurcated stair,spiral stair,cantilever stair,tread riser stair.
	3rd	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.
	4th	Proportion of mortar used for different plasters,preparation of mortars,techniques
14th	1st	Pointing-purpose-Types of pointing Painting -objectives- method of painting new and old wall surfaces, wood surface and metal surfaces -powder coating and spray painting on metal surfaces.
	2nd	Whitewashing-Colour washing-Distemping-internal Damp and Termite proofing -Material and methods.
	3rd	Concept of green building Introduction to Energy Management and Energy Audit of Buildings.
	4th	Aims of energy management of buildings. Types of energy audit,Response energy audit questionnaire
15th	1st	Energy surveying and audit report.


	2nd	PREVIOUS YEAR QUESTION DISCUSSION
	3rd	PREVIOUS YEAR QUESTION DISCUSSION
	4th	REVISION


Lecturer

Verified


Principal 29/6/24

G.I.E.T.(Poly)
Principal
GIET (Polytechnic)
Jagatour, Cttach


29.06.24
Sr.Lecturer
Sr. Lecturer
Civil Engg. Dept.
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