

DISCIPLINE:CIVIL	SEMESTER:3RD	Name of the Teaching Faculty:SHREYAS PRADHAN
Subjct-BMCT	No. of Days per Week Class Alloted-3	Semester From Date: 15/9/22 To Date:22/12/22 No of Weeks 15
Week	Class Day	Theory Topics
September-3rd week	September-3rd week-Day-1	PART :A (BUILDING MATERIALS) ,
	Day-2	1 Stone
		1.1 Classification of rock, uses of stone, natural bed of stone
		1.2 Qualities of good building stone,
		1.3 Dressing of stone
	Day-3	1.4 Characteristics of different types of stone and their uses
September-4th week October-1st week		2 Bricks
	September-4th week-Day-1,2	2.1 Brick earth – its composition
	Day-3	2.2 Brick making – Preparation of brick earth, Moulding, Drying, Burning in kilns (continuous Process)
	October-1st week-Day-2	2.3 Classification of bricks, size of traditional and modular bricks, qualities of good building bricks
October-1st week October-2nd week		3 Cement, Mortar and Concrete t.
	October-1st week-Day-1	3.1 Cement: Types of cements, Properties of cements, Manufacturing of cemen
	Day-3	3.2 Importance and application of blended cement with fly ash and blast furnace slag
	October-2nd week-Day-1	3.3 Mortar: Definition and types of mortar
		3.4 Sources and classification of sand, Bulking of sand
	Day-2	3.5 Use of gravel, morrum and fly ash as different building material
		3.6 Concrete: Definition and composition- Water cement ratio- Workability, mechanical properties and grading of aggregates, mixing, placing, compacting and curing of concrete.
October-2nd week October-3rd week		4 Other Construction Materials . . .
	October-2nd week-Day-3	4.1 Timber: Classification and Structure of timber
	October-3rd week-Day-1	4.2 Seasoning of timber – Importance
	Day-2	4.3 Characteristics of good timber. 4.3 Clay products and refractory materials – Definition and Classification.
	Day-2	class test

	Day-3	4.4 Properties and uses of refractory materials- tiles, terracotta, porcelain glazing
		4.5 Iron and Steel: Uses of cast iron, wrought iron, mild steel and tor steel
October-4th week		5 Surface Protective Materials .
	October-4th week-Day-1	5.1 Composition of Paints, enamels, varnishes
	Day-2,3	5.2 Types and uses of surface protective materials like Paints, Enamels, Varnishes, Distempers, Emulsion, French polish and Wax Polish.
		PART: B (CONSTRUCTIONS TECHNOLOGY)
October-5th week		1 Introduction
	October-5th week-Day-1	1.1 Buildings and classification of buildings based on occupancy
		1.2 Different components of a building.
		1.3 Site investigation – objectives, site reconnaissance and exploratio
October-5th week November-1st week		2 Foundations .
	October-5th week-Day-2	2.1 Concept of foundation and its purpose
		2.2 Types of foundations – shallow and deep
	Day-3	2.3 Shallow foundation-constructional details of : Spread foundations for walls, thumb rules for depth and width of foundation and thickness of concrete block
	November-1st week-Day-2	2.4 Deep foundations: Pile foundations-their suitability, classification of piles based on materials, function and method of installation
November-1st week November-2nd week		3 Walls & Masonry Works
	November-1st week-Day-1	: 3.1 Purpose of walls . :
		3.2 Classification of walls – load bearing, non-load bearing walls, retaining walls
	Day-3	3.3 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).
		3.4 Partition Walls : Suitability and uses of brick and wooden partition walls
		3.5 Brick masonry : Definition of different terms
	November-2nd week-Day-1	3.6 Bond – meaning and necessity: English bond for 1and 1-1/2 Brick thick walls. T, X and right angled corner junctions. Thickness for 1and 1-1/2 brick square pillars in English bond
		3.7 Stone Masonry

		3.8 Glossary of terms –String course, corbel, cornice, block-in-course, grouting, mouldings, templates, throating, through stones, parapet, coping, pilaster and buttress
November-2nd week		4 Doors, Windows And Lintels
November-3rd week	November-2nd week-Day-2	4.1.Glossary of terms used in doors and windows
	November-2nd week-Day-3	4.2 Doors – different types of doors
	November-3rd week-Day-1	4.3.Windows – different types of windows
		4.4 Purpose of use of arches and lintels
November-3rd week		5 Floors, Roofs and Stairs 5
November-4th week		
	November-3rd week-Day-1	.1 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 (Concept only)
	Day-2	5.2 Roofs: Glossary of terms, Types of roofs, concept and function of flat, pitched, hipped and Sloped roofs
November-3rd week	Day-3	Internal Assessment
	November-4th week-Day-1	5.3 Stairs: Glossary of terms; Stair case, winder, landing, stringer, newel, baluster, rise, tread, width of stair case, hand rail, nosing, head room, mummy room.
		5.4Various types of stair case – straight flight, dog legged, open well, quarter turn, half turn (newel and geometrical stairs), bifurcated stair, spiral stair, cantilever stair, tread riser stair.
November-4th,5th week		6 Protective, Decorative Finishes, Damp and Termite Proofing
	Day-2	6.1 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. . .
	Day-3	6.2 Proportion of mortars used for different plasters, preparation of mortars, techniques of plastering and curing
	November-5th week-Day-2	6.3 Pointing – purpose –Types of pointing
		6.4 Painting – objectives – method of painting new and old wall surfaces, wood surface and metal surfaces – powder coating and spray painting on metal surfaces
	November-5th week-Day-1	6.5 White washing – Colour washing – Distempering – internal and external walls
		6.6 Damp and Termite proofing – Materials and Methods.
November-5th week December-1st week		7 Green Buildings, Energy Management and Energy Audit Of Buildings & Project . .

	November-5th week-Day-3	7.1 Concept of green building
		7.2 Introduction to Energy Management and Energy Audit of Buildings
		7.3 Aims of energy management of buildings
	December-1st week-Day-1	7.4 Types of energy audit, Response energy audit questionnaire
		7.5 Energy surveying and audit report.
December-1st week	December-1st week-Day-2	Class Test

Shreyas
29/9/2022
Shreyas Pradhan
(PTGT Civil)