FORMAT OF LESSON PLAN

Name of faculty Mr. Mahender
Discipline Civil Engineering
Semester 2nd Semester
Subject CM

Week	Theory			Practical
	Lecture Day	Topic	Practical Day	Topic
1st	1	Introduction Building Stones Classification of Rocks Geological classification: Igneous, sedimentary and metamorphic rocks	1st	To identify the stones used in building works by visual
	2	Chemical classification; Calcareous, argillaceous and siliceous rocks Physical classification: Unstratified , startified and foliated rocks		
2nd	1	General characteristics of stones – Marble, Kota stone Granite, Sand, Trap, Basalt stone, Lime stone and Slate Requirements of good building stones Identification of common building stones	2nd	To determine the crushing strength of bricks
	2	Quarrying of stones by blasting and its effect on environment Introduction to bricks		
3rd	1	Raw materials for brick manufacturing and properties of good brick making earth Manufacturing of bricks Preparation of clay (manual/mechanically Moulding: hand moulding and machine moulding brick table; drying of bricks, burning	3rd	To determine the water absorption of bricks efflorescence of bricks
	2	types of kilns (Bull's Trench Kiln and Hoffman's Kiln), process of burning, size and weight of standard brick; traditional brick, refractory brick,		
4th	1	sun dried bricks, only line diagram of kilns Classification and specifications of bricks as per BIS: 1077	4th	cement
	2	Testing of common building bricks as per BIS: 3495 Compressive strength water absorption – hot and cold water test, efflorescence,		
5th	1	Dimensional tolerance, soundness test Building tiles; Types of tiles-wall, ceiling, roofing and flooring tiles	5th	To determine normal consistency of cement
	2	Ceramic, terrazo and PVC tiles, : their properties and uses Vitrified tiles, Paver blocks. Stacking of bricks and tiles at site		
6th	1	Introduction, raw materials, flow diagram of manufacturing of cement Ordinary portland cement, rapid hardening cement,low heat cement high alumina cement	6th	cement
	2	blast furnace slag cement, white and coloured cement, portland pozzolana cement, super sulphate cement, Tests of cement – fineness, soundness,		
7th	1	initial and final setting time etc.as per B.I.S. Code. Properties of cement	7th	To determine soundness of cement
	2	Introduction: Lime as one of the cementing materials Classification and types of lime as per BIS Code		
8th	1	Calcination and slaking of lime Identification and uses of different types of timber: Teak	8th	To determine compressive strength of cement
	2	Deodar, Shisham, Sal, Mango, Kail, Chir, Fir, Hollock, Champ Market forms of converted timber as per BIS Code Seasoning of timber: Purpose, methods of seasoning as per BIS Code		
9th	1	Properties of timber and specifications of structural timber Defects in timber, decay in timber	9th	To conduct field test of cement.
	2	Preservation of timber and methods of treatment as per BIS brief description of manufacture and uses: laminated board, block board,		
10th	1	fibre board, hard board, sunmica, plywood, veneers, nu-wood and study of the brand name and cost of the wood based product	10th	To identify various types of timbers such as Teak, Sal, Chir, Sissoo, Deodar,
	2	Cement Panel Board, Moulded Door. Introduction, purpose and use of paints Types, ingredients, properties and uses of oil paints,		
11th	1	water paints and cement paints Covering capacity of various paints Types, properties and uses of varnishes Trade name of different products.	11th	a report work on the construction materials covering water proofing material, cements, steel, paints and timber products
	2	Ferrous metals: Composition, properties and uses of cast iron, mild steel, HYSD steel, high tension steel as per BIS. Commercial forms of ferrous, metals. Aluminium & Stainless Steel.		
12th	1	Plastics – Introduction and uses of various plastic products in buildings doors, water tanks and PVC pipes Fibre Sheets and their manufacture process	12th	cement
	2	Fibre Sheets and their manufacture process. Types and uses of insulating materials for sound and thermal insulation Construction chemicals like water proofing compound, epoxies, polymers		
13th	1	Water proofing, termite proofing and fire resistance materials – types and uses Materials used in interior decoration works like POP, methods of doing POP	13th	To determine normal consistency of cement
	2	Revision/Discussion Revision/Discussion		
14th	1	Revision/Discussion Revision/Discussion	14th	cement
	2	Revision/Discussion Revision/Discussion Revision/Discussion		
15th	1	Revision/Discussion Revision/Discussion	15th	To determine the water absorption of bricks efflorescence of bricks
	2	Revision/Discussion Revision/Discussion		