

## G.P. DHANGAR (Fatehabad)

Name of Faculty : Mr. Mohan Lal

Discipline : CIVIL ENGG.

Semester : 3rd

Subject : Construction materials

Week	Lecture No.	Topic Covered
1	1	Classification of Rocks
	2	Geological classification: Igneous, sedimentary and metamorphic rocks
	3	Chemical classification; Calcareous, argillaceous and siliceous rocks
	4	Physical classification: Unstratified, stratified and foliated rocks
2	5	General characteristics of stones
	6	Requirements of good building stones
	7	Identification of common building stones & their Uses
	8	Quarrying of stones by blasting and its effect on environment
3	9	Introduction to bricks
	10	Raw materials and manufacturing of bricks
	11	Classification and specifications of bricks as per BIS: 1077
	12	Testing of common building bricks as per BIS: 3495
4	13	Compressive strength, water absorption – hot and cold water test, efflorescence, soundness
	14	Revision
	15	Building tiles; Types of tiles-wall, ceiling, roofing and flooring tiles
	16	Ceramic, terrazo and PVC tiles, : their properties and uses
5	17	Vitrified tiles, Paver blocks, interlocking tiles
	18	Introduction, raw materials, flow diagram of manufacturing of cement
	19	Manufacturing process
	20	Various types of Cements, their uses and testing
6	21	Revision
	22	Testing of cement
	23	Properties of cement
	24	Properties of cement
7	25	Revision
	26	Identification and uses of different types of timber
	27	Market forms of converted timber as per BIS Code
	28	Seasoning of timber: Purpose, methods of seasoning as per BIS Code
8	29	Revision
	30	Properties of timber and specifications of structural timber
	31	Defects in timber, decay in timber
	32	Preservation of timber and methods of treatment as per BIS
9	33	Other wood based products
	34	Revision
	35	Introduction, purpose and use of paints
	36	Types, ingredients, properties and uses of oil paints, water paints and cement paints
10	37	Revision
	38	Covering capacity of various paints
	39	Types, properties and uses of varnishes& trade names
	40	Revision
11	41	Ferrous metals: Composition, properties and uses
	42	Commercial forms of ferrous, metals, Aluminium & Stainless Steel.
	43	Revision
	44	Plastics – Introduction and uses of various plastic products in buildings
12	45	Fibre Sheets and their size and uses
	46	Types and uses of insulating materials for sound and thermal insulation
	47	Construction chemicals like water proofing compound, epoxies, polymers
	48	Water proofing, termite proofing and fire resistance materials – types and uses
13	49	Revision
	50	Materials used in interior decoration works
	51	Eco friendly materials for construction of buildings.
	52	Revision