

## PCC-CVE206-T ENGINEERING BUILDING AND DRAWING

<b>Name of the Faculty</b>	:	Ms. Manju Godara
<b>Discipline</b>	:	B.Tech in Civil Engineering
<b>Semester</b>	:	IV (2nd Year)
<b>Subject</b>	:	Engineering Building and Drawing
<b>Lesson Plan Duration</b>	:	15 Weeks
<b>Work Load (Lecture / Practical) per week (in hrs.)</b>	:	Lectures – 03

Week	Lecture Day	Theory Topic (Including assignment / Test)
1 <sup>st</sup>	1	<b>Masonry Construction:</b> Introduction, various terms used
	2	Stone masonry-Dressing of stones, Classifications of stone masonry, safe permissible loads,
	3	Brick masonry-bonds in brick work, laying brick work, structural brick work-cavity and hollow walls
2 <sup>nd</sup>	4	Reinforced brick work, Defects in brick masonry, composite stone and brick masonry, glass block masonry.
	5	<b>Damp-Proofing and Water-Proofing:</b> Defects and causes of dampness
	6	Prevention of dampness, materials used, damp-proofing treatment in buildings
3 <sup>rd</sup>	7	Water proofing treatment of roofs including pitched roofs.
	8	<b>Roofs and Floors:</b> Types of roofs, various terms used
	9	Roof trusses-king post truss, queen post truss etc.
4 <sup>th</sup>	10	Floor structures, ground, basement and upper floors, various types of floorings.
	11	<b>Doors and Windows:</b> Locations, sizes, types of doors and windows
	12	Fixures and fasteners for doors and windows.
5 <sup>th</sup>	13	<b>Acoustics, Sound Insulation and Fire Protection:</b> Classification
	14	Measurement and transmission of sound, sound absorber, classification of absorbers
	15	Sound insulation of buildings, wall construction and accoustical design of auditorium
6 <sup>th</sup>	16	Fire-resisting properties of materials, fire resistant construction and fire protection requirements for buildings
	17	<b>Stones:</b> Classification, requirements of good structural stone, quarrying, blasting
	18	Sorting out of stones, dressing, sawing and polishing, prevention and seasoning of stone
7 <sup>th</sup>	<b>1<sup>st</sup> Minor Test</b>	
8 <sup>th</sup>	19	<b>Brick and Tiles:</b> Classification of bricks, constituents of good brick earth
	20	Harmful ingredients, manufacturing of bricks, testing of bricks, Tiles: Terra-cotta
	21	Manufacturing of tiles and terra-cotta, types of terra-cotta, uses of terra-cotta
9 <sup>th</sup>	22	<b>Limes, Cement and Mortars:</b> Classification of lime, manufacturing, artificial hydraulic lime
	23	Pozzolona, testing of lime, storage of lime, cements composition, types of cement
	24	Manufacturing of ordinary Portland cement, testing of cement
10 <sup>th</sup>	25	Special types of cement, storage of cement.
	26	<b>Mortars:</b> Definition, proportions of lime and cement mortars, mortars for masonry and plastering.
	27	<b>Timber:</b> Classification of timber, structure of timber, seasoning of timber
11 <sup>th</sup>	28	Defects in timber, fire proofing of timber, plywood, fiberboard
	29	Masonite and its manufacturing, important Indian timbers.
	30	<b>Ferrous and Non-Ferrous Metals:</b> Definitions, manufacturing of cast iron
12 <sup>th</sup>	31	manufacturing of steel from pig iron, types of steel, marketable form of steel
	32	Manufacturing of Aluminium and zinc.
	33	<b>Paints and Varnishes:</b> Basic constituents of paints, types of paints, painting of wood
13 <sup>th</sup>	34	Constituents of varnishes, characteristics and types of varnishes.
	35	<b>Plastic:</b> Definition, classification of plastics
	36	Composition and raw materials, manufacturing
14 <sup>th</sup>	<b>2<sup>nd</sup> Minor test</b>	
15 <sup>th</sup>	37	Characteristics and uses, polymerization
	38	Classification
	39	Special varieties

