

Panipat Institute of Engineering and Technology

Department of Civil Engineering

For Lectures in B. Tech. Civil Engineering Third Semester

Course No.	Title of the Course	Course Structure	
CE-207A	Building Construction Practice	L-T-P	3-0-0
COURSE OUTCOMES (CO)			
CO1	Students Will evaluate various types of masonry and wall.		
CO2	Will evaluate different type of foundation.		
CO3	Will understand the need of cavity wall, partition wall and damp proofing.		
CO4	Will understand and evaluate various type of doors and windows as well as roofs and floors.		
Unit No	Topics To Be Covered	Lecture Nos	
1	Introduction, various terms used, stone masonry-Dressing of stones,	1	
	Classifications of stone masonry, safe permissible loads	2	
	Brick masonry-bonds in brick work, laying brick work,	3	
	structural brick work-cavity and hollow walls, reinforced brick work	4	
	Defects in brick masonry, composite stone and brick masonry, glass block masonry	5	
	Advantages, position of cavity, types of non-bearing partitions,	6	
	constructional details and precautions, construction of masonry cavity wall	7	
	Functions, types of shallow foundations	8	
	sub-surface investigations, geophysical methods	9	
2	Foundations in water logged areas, design of masonry wall foundation.	10	
	introduction to deep foundations i.e. pile and pier foundations	11	
	Defects and causes of dampness, prevention of dampness, materials used,	12	
	damp-proofing treatment in buildings	13	
	, water proofing treatment of roofs including pitched roofs.	14	
	Types of roofs, various terms used,	15	
3	roof trusses-king post truss, queen post truss etc	16	
	. Floor structures, ground, basement and upper floors,.	17	
	various types of floorings	18	
	Locations, sizes, types of doors and windows,	19	
	fixures and fastners for doors and windows	20	
	Classification of bricks ,constituents of good brick earth, harmful ingredients,	21	
	Manufacturing of bricks, testing of bricks.	22	
	Tiles: Terra-cotta, manufacturing of tiles and terra-cotta, types of terra-cotta, uses of terra-cotta	23	
	24		

	Classification of lime, manufacturing, artificial hydraulic lime, pozzolona,	25
	testing of lime, storage of lime ,cements composition	26
	types of cement, manufacturing of ordinary Portland cement,	27
4	testing of cement, special types of cement, storage of cement	28
	Mortars: Definition, proportions of lime and cement mortars, mortars for masonry and plastering	29
	Classification, requirements of good structural stone	30
	quarrying, blasting and sorting out of stones	31
	dressing, sawing	32
	polishing, prevention and seasoning of stone.	33
	Classification of timber, structure of timber	34
	seasoning of timber, defects in timber,	35
	fire proofing of timber, plywood, fiberboard,	36
	masonite and its manufacturing, important Indian timbers.	37
	Basic constituents of paints, types of paints, painting of wood	38
	constituents of varnishes, characteristics and types of varnishes.	39

Sr. No.	Course Coordination Committee	Name	Contact No	E-Mail Id
1.	Course Coordinator	Ajeet	8708171615	ajeet.civil@piet.co.in