

PGD in Real Estate Construction and Management		Trimester I	
Building Construction		Code : RECM 04	
Periods per week		Lecture	03
		Practical	--
		Tutorial	02
Evaluation Scheme		Hours	Marks
	Term End Examination (Theory)	03	100 (Weightage 50%)
	Internal Continuous Assessment	-	50 (Weightage 100%)
	Test	01	20
	Quiz/viva/ presentations/ group work based on assignments given by faculty	--	30
Objectives	<ul style="list-style-type: none">To Study various construction techniques.To Study key aspects and sequence of construction activities		
Outcome	After successful completion of this course, students will be able to <ul style="list-style-type: none">Assess the construction methods of each element of a structureDesign typical elements for a structure		
Detailed Syllabus			
Units	Topics		Duration (Hrs.)
1	Foundation : Necessity and Purpose of Foundation, Shallow Foundation, Spread foundation, raft foundation, deep foundation and its types, Precast concrete piles. Modern methods of pile installation		04

2.	Masonry: Terminology, Preparation, construction procedure, post construction precautions, brick masonry stretcher bond and half brick thick masonry, hollow and solid concrete block masonry, fixing of door and window frame in masonry, block masonry. Procedure of constructing un-coursed Rubble and coursed masonry.	05
3	Excavation: Manual and mechanical method of Excavation, characteristics of machines used for excavation, disposal of excavated material, dewatering of trenches, different methods used, shoring and strutting of Trenches, precaution while excavation, fencing – caution signs.	03
4	Formwork and Scaffolding : Types, basic factors governing selection. Erecting and removal of formwork. Scaffolding types, precautions	03
5	Cement Concrete: Basics of Mix design of concrete and uses of different mix of concrete, procedure of mixing concrete, manual and machine mixing, transporting laying, compacting and curing of concrete, admixtures used in concrete, Ready mix concrete. High performance concrete	04
6	Reinforced Cement Concrete: Terminology, Different types of RCC members, definitions, functions, ingredients of R.C.C. concrete, shape and types of Reinforcing steel bars used in RCC members.	04
7	Floors : Solid ground floor, plinth fillings, floor finish with murum, brick-bat concrete, Indian patent stone, cement tiles, China mosaic, floorings for special purposes such as factories, warehouses, stables, garages, railway platforms, upper floors: jack arch construction, mezzanine floors and lofts.	04
8	Pointing & Plastering: Necessity and types, methods of providing pointing and plastering	03
	Total	30

Text books :

1. Chudley Roy(2013) “Building Construction Handbook” Routledge Publications.
2. Mantri Sandeep (2011) “The A to Z of Practical Building Construction and its Management” Mantri Publications.

Reference Books:

1. Mathur S. (2012) “Building Construction Handbook” SBS Publishers.
2. McKay (2013) “ Building Construction” Pearson India
3. Shepelev. A, (1986) “Plastering”, Mir Publishers, Moscow.

Internal Continuous Assessment

1. One class test based on the above syllabus.
2. Quiz, viva, presentation, Group work, based on assignments given by faculty.