

Discipline		Architectural Assistantship	
Year		1st	
Subject		Building Materials and Construction Technology-I	
Lesson Plan Duration		15 WEEKS	
Lecture per week		3	
Practicals per week		4	
Week	Theory		Practical
	Lecture Day	Topic (including assignment / test)	Practical Day
Unit-I Building Stones			
1st	1st	Classification of rocks,	
	2nd	Characteristics of good building stones,Utility of stones,	
	3rd	Testing and natural bed of stone	
	4th	Common building stones,composition, properties,use and their	
	5th		
	6th	Characteristics and classification of stone masonry	2 Different types of stone facing
	7th		
2nd	8th	Transportation,Storage systems/stacking system	Sheet No. 1- Various types of stone masonry
	9th		
	10th	Selection of stones for diferent building works	
	11th		
	12th		
	13th	Advantages and Disadvantages of different types of stones and their suitability to different elements of building	
	14th		
Unit-II Bricks			
3rd	15th	Sizes, classification and Composition of bricks	Sheet no. 3- different shapes and sizes of bricks
	16th	Properties and uses of first class and second class bricks, clay and burnt bricks ,Characteristics of a good brick including size and weight of a standard brick	
	17th		
	18th	Test for burnt clay bricks -- Compressive strength, Water absorption & efflorescence, Fire bricks, its properties, uses and availability.	
	19th		
	20th	Stretcher and header courses in various wall thickness,	
	21st		
4th	22nd	T-junctions and Cross-junction in ½, 1 and 1 ½ thick brick wall	Sheet no. 4- different bonds in different wall thickness, T-junctions, cross junction
	23rd		
	24th		
	25th		

	26th	Sessional Week-1	
	27th		
	28th		
5th	29th	Different types of bonds - English, Flemish and Rat Trap Bond in different wall width	5 Reinforced brick work and jallies
	30th		
	31st	Advantages and Disadvantages of different Bonds	
	32nd		
	33rd	,Advantages and Disadvantages of different types of bricks and their suitability to different elements of building	
	34th		
	35th		
Unit-III Foundation			
6th	36th	Different types of foundations (normal and eccentric)	6 Drawing of spread foundation, toe wall and verandah steps foundation
	37th		
	38th		
	39th	Their advantage of one over other.	
	40th		
	41st	Brief knowledge of different types of foundations in basements	
	42nd		
7th	43rd	Foundations for columns and verandah steps	7 Foundation detail for brick pier and column foundation
	44th		
	45th		
	46th		
	47th		
	48th		
	49th		
Unit-IV Openings in Walls			
8th	50th	Classification of arches and lintels as per finish, shape and material	
	51st		
	52nd		
	53rd		
	54th		
	55th		
	56th		
9th	57th	Brick jallies and reinforcement.	
	58th		
	59th		
	60th		
	61st	Sessional Week-2	
	62nd		
	63rd		
10th	64th	Classification of lintels as per finish, shape and material	8 Drawings of lintels and arches of various materials and various wall thickness
	65th		
	66th		
	67th		
	68th	Brick jallies in ½ and 1 thick brick wall in English and Flemish	

	69th	Bond	
	70th		
Unit-V Damp Proof Course			
11th	71st	Explanation of DPC and reasons for its use	9 Demonstration Showing of Damp proof course in a horizontal and vertical brick wall.
	72nd		
	73rd		
	74th		
	75th	Classification of dpc material as per hardness of material	
	76th		
	77th		
12th	78th	Sources and effects of dampness	10 Application of DPC on spread foundation and basements
	79th		
	80th		
	81st		
	82nd	BIS stipulations of damp proofing	
	83rd		
	84th		
13th	85th	Treatment of Building component for effective damp proofing.	
	86th		
	87th		
	88th		
	89th	Sessional Week-3	
	90th		
	91st		
14th	92nd	Revision full syllabus	
	93rd	Revision full syllabus	
	94th	Revision full syllabus	
	95th	Revision full syllabus	
	96th	Revision full syllabus	
	97th	Revision full syllabus	
	98th	Revision full syllabus	
15th	99th	Revision full syllabus	
	100th	Revision full syllabus	
	101st	Revision full syllabus	
	102nd	Revision full syllabus	
	103rd	Revision full syllabus	
	104th	Revision full syllabus	
	105th	Revision full syllabus	