

Lesson Plan

Name Of Faculty : HC. Pawar

Discipline : Arch. Asst.

Semester : 1st

Subject : BM

Lesson Plan Duration : 15 week(July 2018 to Nov 2018)

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment / Test)	Practical Day	Topic
Ist	1	Building Stone - Utility of stones -Classification of rocks -Characteristics of good building stones -Testing of stones -Natural bed of stones	1 st	
	2	-Common building stones -Prevailing market rates and sizes -Transportation costs -Standard measurements in the carriage transport -Storage systems/stacking system		
IInd	3	Bricks -Classification of bricks – properties and uses of first class, second-class, third class and over burnt bricks -Characteristics of good brick	2 nd	
	4	-Classification of bricks – properties and uses of first class, second-class,		

		third class and over burnt bricks -Characteristics of good brick		
IIIrd	5	-Size and weight of a standard brick and commonly available brick -Composition of brick earth -Test for burnt clay bricks – Compressive strength test, water absorption test and Efflorescence Test	3 rd	
	6	-Fire bricks, its properties, uses and availability -Availability of various types of bricks in the market e.g. machine made bricks, handmade firebricks.		
IVth	7	-Transportation cost with different modes of transportation and staking of bricks on the site -Brick Tiles	4 th	
	8	Lime -Uses of lime requirements with respect to its use as mortar since ancient times; structural strength and economics; classification of lime. -Setting action of fat lime and hydraulic lime		
Vth	9	-Storing of lime -Present day use of lime, its strength and curing segments with respect to its use as mortar since ancient times; structural strength and economics	5 th	
	10	Sessional-1st		
VIth	11	Cement -Uses of cement -Composition of Portland cement -Setting and hardening of cement	6 th	
	12	-Types of cement, their properties and uses -Storage of cement – transportation		

		and carriage capacities		
VIIth	13	Aggregates (types, uses and transportation) -Course Aggregates -Fine Aggregates	7 th	
	14	Mortar -Different types of sand and other Puzzolona material -Functions of Mortar		
VIIIth	15	-Preparation of cement mortar, lime mortar, lime cement mortar and their uses. Proportion of mortar for different building works	8 th	
	16	Concrete -Definition of concrete, workability of concrete -Water - Cement Ratio -Compaction of concrete -Curing of concrete -Mixing, placing and uses of lime concrete and cement concrete, aggregate and its grading including Flyash and cement concrete -Reinforced cement concrete (RCC), M15, M20		
IXth	17	-Necessity of providing reinforcement Properties of RCC -Handling on site, quality and quantity checking/testing and taking measurement -Introduction to Ready Mix Concrete (RMC), Self-comparing concrete and	9 th	

		Light-weight concrete.		
	18	<ul style="list-style-type: none"> -Characteristics and uses of common Indian timbers i.e. Sal, Deodar, Kali, Tali, Chir, and Teak etc. -Characteristics of hard wood and soft wood -Defects in timber Characteristics of good timber 		
Xth	19	<ul style="list-style-type: none"> - Different methods of seasoning of timber -Preservation of timber/preservative materials for timber - Availability of different types of timber and their comparative market prices. 	10 th	
	20	Sessional-2nd		
XIth	21	Plastics <ul style="list-style-type: none"> -Natural (Shellac, casein and cellulose) and synthetic plastics -Thermosetting and thermoplastics and their uses -Plastics used as materials in building, industry e.g. flooring, roofing, wall paneling, pipes, doors etc 	11 th	
	22	Ferrous and non-ferrous metals (Aluminum, copper, lead, zinc, tin etc) their uses and applications in buildings.		
XIIth	23	Glass <ul style="list-style-type: none"> -Sheet glass -Wired glass -Laminated safety glass -Plate glass -Insulating glass -Obscured glass 	12 th	

		<ul style="list-style-type: none"> -Coloured glass -Tinted glass -Heat absorbing glass 		
	24	<ul style="list-style-type: none"> -Glass blocks -Float glass -Toughened glass -Structural glazing -Etched glass -Stained glass -Mirrors -E-glass 		
XIIIth	25	Building hardware <ul style="list-style-type: none"> -Tower bolts -Hinges including concealed hinges -Door Handles -Door springs 	13 th	
	26	<ul style="list-style-type: none"> -Latches -Floor door stopper/floor springs and magnetic types stoppers -Fan light pivots -Mortice lock 		
XIVth	27	<ul style="list-style-type: none"> -Door closer – including hydraulic types -Ventilator chains -Wire gauze -Magnetic cupboard closers 	14 th	
	28	Paints and Varnishes, Drying Oil, Pigment, Drier, Thinner <ul style="list-style-type: none"> -Water based paints -Distempers -Oil based paints and emulsions -Cement paints -Acrylic emulsions -Melamine finishes 		
XVth	29	<ul style="list-style-type: none"> -Varnishes -Spirit polish, wax polish -Lacquers -Stucco -Tar and Bitumen paint 	15 th	

		-Glazing putty		
	30	Sessional-3rd		