

# Lesson Plan

**Name Of Faculty** : Jyoti Choudhary

**Discipline** : Arch. Asst.

**Semester** : 1st

**Subject** : BM

**Lesson Plan Duration** : 15 week

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 <sup>st</sup>	
	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 <sup>nd</sup>	
	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 <sup>rd</sup>	
	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 <sup>th</sup>	
	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 <sup>th</sup>	
	10	<b>Sessional-1<sup>st</sup></b>		
VIth	11	Cement -Uses of cement -Composition of Portland cement -Setting and hardening of cement	6 <sup>th</sup>	
	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 <sup>th</sup>	
	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 <sup>th</sup>	
	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 <sup>th</sup>	

		Light-weight concrete.		
	18	-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	- 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 <sup>th</sup>	
	20	<b>Sessional-2<sup>nd</sup></b>		
XIth	21	Plastics -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 <sup>th</sup>	
	22	Ferrous and non-ferrous metals (Aluminum, copper, lead, zinc, tin etc) their uses and applications in buildings.		
XIIth	23	Glass -Sheet glass -Wired glass -Laminated safety glass -Plate glass -Insulating glass -Obscured glass	12 <sup>th</sup>	

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

		-Glazing putty		
	30	<b>Sessional-3<sup>rd</sup></b>		