

GANDHI ACADEMY OF TECHNOLOGY AND ENGINEERING				
DEPARTMENT OF CIVIL ENGINEERING				
LESSON PLAN				
DISCIPLINE:-CE				
SEMESTER:-6TH	FROM DATE:-02.01.2024		TO DATE:-23.04.2024	
Name of Teaching Faculty: NIKITA PATRO				
SUBJECT:- ADVANCE CONSTRUCTION TECHNIQUE & EQUIPMENT				
NO. OF PERIOD/PER WEEK CLASS ALLOTTED:-4				
TOTAL NO. OF CLASS AVAILABLE IN SEM:-60				
SL NO.	WEEK	CLASS DATE	NO. OF CLASS/DAY	TOPICS
1	Week-01	02.01.2024	1	Advanced construction materials , Fibers and Plastics.
		03.01.2024	1	Types of fibers- Steel, Carbon, glass fibers, Use of fibers as construction material,
		04.01.2024	1	properties of Fibers. Types of plastics- PVC, RPVC, HDPE, FRP, GRP etc. Colored plastic sheets.
		05.01.2024	1	Use of plastic as construction material
2	Week-02	09.01.2024	1	Artificial Timbers – Properties and uses of artificial timber.
		10.01.2024	1	Types of artificial timber available in market, strength of artificial timber
		11.01.2024		
		12.01.2024	1	Miscellaneous materials – Properties
3	Week-03	16.01.2024	1	Uses of acoustics materials, wall claddings,
		17.01.2024	1	plaster boards, micro-silica, artificial sand,
		18.01.2024	1	Bonding agents, adhesives
		19.01.2024	1	Prefabrication , Introduction
4	Week-04	23.01.2024		HOLIDAY
		24.01.2024	1	Necessity and scope of prefabrication of buildings, history of prefabrication,
		25.01.2024	1	Current uses of prefabrication , types of prefabricated systems
		26.01.2024		HOLIDAY
5	Week-05	30.01.2024	1	The theory and process of prefabrication
		31.01.2024	1	Design principle of prefabricated systems, types of prefabricated
		01.02.2024	1	Elements, modular coordination
		02.02.2024	1	Indian standard recommendation for modular planning

6	Week-06	06.02.2024	1	Earthquake Resistant Construction
		07.02.2024	1	Building Configuration ,Lateral Load resisting structures
		08.02.2024	1	Building characteristics
		09.02.2024	1	Effect of structural irregularities-vertical irregularities, plan configuration problems
7	Week-07	13.02.2024	1	Safety consideration during additional construction and alteration of existing Buildings.
		14.02.2024		HOLIDAY
		15.02.2024	1	Additional strengthening measures in masonry building-corner reinforcement,
		16.02.2024	1	lintel band, sill band, plinth band, roof band, gable band
8	Week-08	20.02.2024	1	Retrofitting of Structures
		21.02.2024	1	Seismic retrofitting of reinforced concrete buildings
		22.02.2024	1	Sources of weakness in RC frame building
		23.10.2023	1	Classification of retrofitting techniques
9	Week-09	27.02.2024	1	Retrofitting their uses
		28.02.2024	1	Building Services
		29.02.2024	1	Cold Water Distribution in high rise building, lay out of installation
		01.03.2024	1	Hot water supply – General principles for central plants-layout
10	Week-10	05.03.2024		HOLIDAY
		06.03.2024	1	Sanitation –soil and waste water installation in high rise buildings
		07.03.2024	1	Electrical services – i) requirements in high rise buildings
		08.03.2024		HOLIDAY
11	Week-11	12.03.2024	1	Layout of wiring - types of wiring iii) Fuses and their types
		13.03.2024	1	Earthing and their uses ,Lighting – Requirement of lighting
		14.03.2024	1	Measurement of light intensity
		15.03.2024	1	Ventilation - Methods of ventilation (Natural and artificial Systems of ventilation) problems on ventilation
12	Week-12	19.03.2024	1	Mechanical Services- Lifts, Escalator, Elevators
		20.03.2024	1	Types and uses.

13	Week-13	21.03.2024	1	Construction and earth moving equipments
		22.03.2024	1	Planning and selection of construction equipments
		26.03.2024		HOLIDAY
		27.03.2024	1	Study on earth moving equipments like drag line,
		28.03.2024	1	Tractor, bulldozer
		29.03.2024		HOLIDAY
14	Week-14	02.04.2024	1	Power shovel
		03.04.2024	1	Study and uses of compacting equipments like tamping rollers,
		04.04.2024	1	Smooth wheel rollers, Pneumatic tired rollers
		05.04.2024	1	Vibrating compactors, Owning and operating cost – problems
15	Week-15	08.04.2024		
		09.04.2024	1	Soil reinforcing techniques
		10.04.2024		Necessity of soil reinforcing
		11.04.2024	1	Use wire mesh and geo-synthetics.
16	Week-16	12.04.2024	1	Strengthening of embankments,
		15.04.2024		HOLIDAY
		16.04.2024		HOLIDAY
		17.04.2024	1	Slope stabilization in cutting ,
17	Week-17	18.04.2024	1	embankments by soil reinforcing techniques

