



## LESSON PLAN OF ACTE 6<sup>TH</sup> SEM 2022-2023

Period	Unit	Topic
1	Advanced Construction Materials	Steel fibers and Steel Fiber Reinforced Concrete
2		Carbon fibers and its Uses
3		Glass Fibers and its Uses
4		Polyvinyl Chloride
5		HDPE FRP and GRP
6		Properties and uses of artificial timber
7		Artificial Timbers (Hardboard, Glulam, Chipboard)
8		Properties and uses of acoustics materials, wall claddings,
9		plaster boards
10		adhesives
11	Prefabrication	Introduction, necessity and scope of prefabrication of buildings
12		History of prefabrication
13		Current uses of prefabrication
14		Types of prefabricated systems
15		Advantages and disadvantages of prefabrication
16		Theory, process and design principle of prefabricated systems
17		Types of prefabricated elements
18		Modular coordination
19	Earthquake Resistant Construction	Building Configuration
20		Lateral Load resisting structures
21		Building characteristics
22		Effect of structural irregularities-vertical irregularities, plan configuration problems
23		Safety consideration during additional construction and alteration of existing Buildings
24		Additional strengthening measures in masonry building-corner reinforcement, lintel band, sill band, plinth band, roof band, gable band etc.
25		Lintel band, sill band, plinth band, roof band, gable band, etc.
26		Revision
27	Retrofitting of structures	Seismic retrofitting of reinforced concrete buildings
28		Sources of weakness in RC frame building
29		classification of retrofitting techniques & their uses
30		revision
31		unit test

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33	Building services	Cold water distribution in high rise building
34		hot water supply
35		sanitation
36		electrical services
37		layout of wiring
38		lightning
39		ventilation
40		mechanical services
41		revision
42	Construction and Earth moving Equipments	planning & selection of construction equipment
43		study on earth moving equipments
44		drag line, tractor, bulldozer, power shovel
45		study and uses of compacting equipment
46		study and uses of compacting equipment
47		tamping rollers, smooth wheel rollers
48		pneumatic tired rollers & vibrating compactors
49		owning & operating cost
50		revision
51		doubt clearing session
52		unit test
53	Soil reinforcing techniques	Introduction
54		necessity of soil reinforcing
55		geo-synthetics
56		strengthening of embankments
57		slope stabilization in cutting & embankments
58		revision
59		unit test
60		doubt clearing session

Prepared By- Priyanka Mohapasayat