

Academic Lesson Plan for Summer Semester - 2022

Name of the Teaching Faculty:
Semester: 6th
No.of Periods Per Week: 60
End semester Exam: 80
Internal Assessment:20
Total Marks: 100

Discipline/ Dept.: CIVIL
Subject(Theory/Practical):Th.3
Total Periods: 60

Week	Class Day	Unit	Theory/ Practical Topics
1 st	1 st	1.1	Advanced construction materials Fibers and Plastics- Types of fibers- Steel, Carbon, glass fibre
	2 nd	1.1	Use of fibers as construction material, properties of Fibers.
	3 rd	1.1	Types of plastics- PVC, RPVC, HDPE, FRP, GRP etc. Colored plastic sheets
	4 th	1.1	Use of plastic as construction material
2 nd	1 st	1.2	1.2 Artificial Timbers – Properties and uses of artificial timber
	2 nd	1.2	Types of artificial timber available in market
	3 rd	1.2	strength of artificial timber.
	4 th	1.3	1.3 Miscellaneous materials – Properties and uses of acoustics materials
3 rd	1 st	1.3	wall claddings, plaster boards, micro-silica
	2 nd	1.3	artificial sand, bonding agents, adhesives etc.
	3 rd	1.3 2.1	Prefabrication 2.1 Introduction, necessity and scope of prefabrication of buildings
	4 th	2.1	history of prefabrication, current uses of prefabrication
4 th	1 st	2.1	types of prefabricated systems
	2 nd	2.1	classification of prefabrication, advantages and disadvantages of prefabrication,
	3 rd	2.2	2.2 The theory and process of prefabrication
	4 th	2.2	design principle of prefabricated systems
5 th	1 st	2.2	types of prefabricated elements, modular coordination
	2 nd	2.3	2.3 Indian standard recommendation for modular planning.
	3 rd	3.1	Earthquake Resistant Construction 3.1 Building Configuration
	4 th	3.2	3.2 Lateral Load resisting structures
6 th	1 st	3.3	3.3 Building characteristics
	2 nd	3.4	3.4 Effect of structural irregularities-vertical irregularities, plan configuration problems
	3 rd	3.4	Safety consideration during additional construction and alteration of existing Buildings. Additional strengthening measures in masonry building- corner reinforcement, lintel band, sill band, plinth band, roof band, gable band etc.
	4 th	4.1	4.1 Seismic retrofitting of reinforced concrete buildings :

7 th	1 st	4.1	Discussion about seismic retrofitting in building
	2 nd	4.1	Seismic retrofitting of reinforced concrete buildings :
	3 rd	4.1	Sources of weakness in RC frame building
	4 th	4.1	Sources of weakness in RC frame building
8 th	1 st	4.1	-Classification of retrofitting techniques
	2 nd	4.1	uses of retrofitting techniques
	3 rd	5.1	Building Services 5.1 Cold Water Distribution in high rise building, lay out of installation
	4 th	5.2	5.2 Hot water supply – General principles for central plants- layout
9 th	1 st	5.3	5.3 Sanitation –soil and waste water installation in high rise buildings
	2 nd	5.4	5.4 Electrical services – i) requirements in high rise buildings
	3 rd	5.4	ii) Layout of wiring - types of wiring iii) Fuses and their types
	4 th	5.4	iv)Earthing and their uses
10 th	1 st	5.5	5.5 Lighting – Requirement of lighting, Measurement of light intensity
	2 nd	5.6	5.6 Ventilation - Methods of ventilation (Natural and artificial Systems of ventilation)
	3 rd	5.6	5.6 Ventilation - Methods of ventilation (Natural and artificial Systems of ventilation)
	4 th	5.7	5.7 Mechanical Services- Lifts, Escalator
11 th	1 st	5.7	Elevators – types and uses.
	2 nd	6.1	Construction and earth moving equipments – 6.1 Planning of construction equipment
	3 rd	6.1	selection of construction equipments
	4 th	6.2	6.2 Study on earth moving equipments like drag line
12 th	1 st	6.2	tractor, bulldozer, Power shovel
	2 nd	6.3	6.3 Study and uses of compacting equipments like tamping rollers
	3 rd	6.3	Smooth wheel rollers
	4 th	6.3	Pneumatic tired rollers
13 th	1 st	6.3	vibrating compactors
	2 nd	7.1	Soil reinforcing techniques 7.1 Necessity of soil reinforcing
	3 rd	7.2	Necessity of soil reinforcing
	4 th		
14 th	1 st	7.2	geo-synthetics
	2 nd	7.3	7.3 Strengthening of embankments
	3 rd	7.3	Slope stabilization in cutting and by soil reinforcing techniques.
	4 th	7.3	Slope stabilization in embankments by soil reinforcing techniques.

15 th	1 st	PREVIOUS YEAR QUESTIONS DISCUSSION
	2 nd	PREVIOUS YEAR QUESTIONS DISCUSSION
	3 rd	DOUBT CLEARING CLASS
	4 th	DOUBT CLEARING CLASS