

LESSON PLAN FOR SESSION SUMMER (2023-24)

PROGRAMME : CIVIL ENGINEERING COURSE NAME : ACT&E COURSE CODE : TH-4 SEMESTER : 6 TH PERIODS/WEEK: 5 TOTAL PERIODS: 65		NAME OF THE FACULTY: SAIRAM MISHRA SESSION : 2023-24 DATE : 14/02/23 To : 23/05/23
WEEK	CLASS	TOPICS
FEBRUARY 3 rd week	1	1.Advanced construction materials 1.1 Fibers and Plastics- Types of fibers. - Steel, Carbon, glass fibers
	2	Use of fibers as construction material, properties of Fibers
	3	Types of plastics- PVC, RPVC, HDPE, FRP, GRP etc
	4	Colored plastic sheets. Use of plastic as construction material.
	5	1.2 Artificial Timbers – Properties and uses of artificial timber.
4 th week	1	Types of artificial timber available in market, strength of artificial timber.
	2	1.3 Miscellaneous materials – Properties and uses of acoustics materials.
	3	wall claddings, plaster boards, micro-silica, artificial sand, bonding agents, adhesives etc.
	4	2.Prefabrication 2.1 Introduction, necessity and scope of prefabrication of buildings,
	5	history of prefabrication, current uses of prefabrication
MARCH 1 st week	1	Types of prefabricated systems, classification of prefabrication, advantages and disadvantages of prefabrication,
	2	2.2 The theory and process of prefabrication, design principle of prefabricated systems, types of prefabricated elements, modular coordination .
	3	2.3 Indian standard recommendation for modular planning.

	4	3. Earthquake Resistant Construction 3.1 Building Configuration
	5	3.2 Lateral Load resisting structures
2 nd week	1	UNIT TEST
	2	3.3 Building characteristics 3.4 Effect of structural irregularities-vertical
	3	irregularities, plan configuration problems.
	4	3.5 Safety consideration during additional
	5	construction and alteration of existing Buildings
3 rd week	1	3.6 Additional strengthening measures in masonry building-corner reinforcement,
	2	lintel band, sill band, plinth band, roof band, gable band etc.
	3	4. Retrofitting of Structures 4.1 Seismic retrofitting of reinforced concrete buildings
	4	4.2 Sources of weakness in RC frame building
	5	4.3 Classification of retrofitting techniques and their uses
4 th week	1	Internal Assessment
	2	5.1 Cold Water Distribution in high rise building, lay out of installation
	3	5.2 Hot water supply – General principles for central plants-layout
	4	5.3 Sanitation –soil and waste water installation in high rise buildings
	5	5.4 Electrical services – i) requirements in high rise buildings ii) Layout of wiring - types of wiring
APRIL 1 st week	1	iii) Fuses and their types iv) Earthing and their uses
	2	5.5 Lighting – Requirement of lighting, Measurement of light intensity
	3	5.6 Ventilation - Methods of ventilation (Natural and artificial Systems of ventilation) problems on ventilation
	4	5.7 Mechanical Services- Lifts, Escalator, Elevators – types and uses.

	5	6. Construction and earth moving equipments –6.1 Planning and selection of construction equipments
2 nd week	1	UNIT TEST
	2	6.2 Study on earth moving equipments like drag line, tractor, bulldozer, Power shovel

	3	6.3 Study and uses of compacting equipments like tamping rollers, Smooth wheel rollers, Pneumatic tired rollers and vibrating compactors
	4	6.4 Owning and operating cost – problems
	5	7. Soil reinforcing techniques
3 rd week	1	7.1 Necessity of soil reinforcing.
	2	7.2 Use wire mesh and geo-synthetics.
	3	7.3 Strengthening of embankments, Slope stabilization in cutting and embankments by soil reinforcing techniques
	4	DOUBT CLEAR CLASS
	5	Seismic retrofitting of reinforced concrete buildings

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	2	Sanitation –soil and waste water installation in high rise buildings
	3	Electrical services – i) requirements in high rise buildings ii) Layout of wiring - types of wiring
	4	Hot water supply – General principles for central plants-layout
	5	Additional strengthening measures in masonry building-corner reinforcement,

MAY 1 st	1	Hot water supply – General principles for central plants-layout
	2	Cold Water Distribution in high rise building, lay out of installation
	3	Study and uses of compacting equipments like tamping rollers, Smooth wheel rollers, Pneumatic tired rollers and vibrating compactors
	4	General principles for central plants-layout
	5	requirements in high rise buildings ii) Layout of wiring - types of wiring

2 nd	1	Sanitation –soil and waste water installation in high rise buildings
	2	Study and uses of compacting equipments like tamping rollers, Smooth wheel rollers, Pneumatic tired rollers and vibrating compactors

	3	UNIT TEST
	4	Miscellaneous materials – Properties and uses of acoustics materials
	5	Fuses and their types iv) Earthing and their uses

3 rd	1	Revision & Doubt class
	2	Revision & Doubt class
	3	Revision & Doubt class
	4	Revision & Doubt class
	5	Revision & Doubt class

Abha
20/2/23
Concern
Faculty

Sybi
13.2.23
HOD
Civil engineering.

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Academic Coordinator
GP Nabarangpur

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Principal
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