

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN-2021/22(SUMMER)

Discipline : CIVIL		Semester: 6th		Name of the Teaching Faculty :DAMAYANTI PRADHAN	
Subject : ACT&E(Th.3)		per week class allotted : 04		Semester From date : 10.03.2022	To Date : 28.06.2022
Month	Week	Day	Unit	Topics	
MARCH	2ND	4TH	UNIT-1	Advanced construction materials	
				1.1 Fibers and Plastics Types of fibers- Steel, Carbon, glass fibers, Use of fibers as construction. Types of plastic.Use of plastic as construction material.	
		5TH		1.2 Artificial Timbers - Properties and uses of artificial timber. Types of artificial timber available in market, strength of artificial timber	
		6TH		1.3 Miscellaneous materials - Properties and uses of acoustics materials, wall claddings, plaster boards, micro-silica, artificial sand, bonding agents, adhesives etc.	
	3RD	1ST		Question and Answer Discussion	
		2ND		Do	
		3RD		Question Discussion	
		6TH	UNIT-2	Prefabrication	
	4TH	1ST		2.1 Introduction, necessity and scope of prefabrication of buildings, history of prefabrication, current uses of prefabrication , types of prefabricated systems.	
		2ND		2.2 The theory and process of prefabrication, design principle of prefabricated systems, types of prefabricated elements, modular coordination	
		3RD		2.3 Indian standard recommendation for modular planning. Question discussion	
		4TH		Class test-1	
		1ST		Earthquake Resistant Construction	

APRIL	5TH	2ND	UNIT-3	3.1 Building Configuration
		3RD		3.2 Lateral Load resisting structures
		4TH		3.3 Building characteristics
	2ND	1ST		3.4 Effect of structural irregularities-vertical irregularities, plan configuration problems.
		2ND		3.5 Safety consideration during additional construction and alteration of existing Buildings.
		3RD		3.6 Additional strengthening measures in masonry building-corner reinforcement, lintel band, sill band, plinth band, roof band, gable band etc.
		4TH		Question and answer Discussion
	3RD	3RD		Question and answer Discussion
	4TH	1ST	UNIT-4	Retrofitting of Structures
		2ND		4.1 Seismic retrofitting of reinforced concrete buildings :
		3RD		4.2 -Sources of weakness in RC frame building
		4TH		4.3 -Classification of retrofitting techniques and their uses
	5TH	1ST	UNIT-5	Question and answer Discussion
		2ND		Building Services
		3RD		5.1 Cold Water Distribution in high rise building, lay out of installation
AY	1ST	4TH		5.2 Hot water supply - General principles for central plants-layout
		5TH		5.3 Sanitation -soil and waste water installation in high rise buildings
	2ND	2ND		5.4 Electrical services - i) requirements in high rise buildings ii) Layout of wiring - types of wiring iii) Fuses and their types iv) Earthing and their uses
		3RD		5.5 Lighting - Requirement of lighting, Measurement of light intensity
		4TH		5.6 Ventilation - Methods of ventilation (Natural and artificial Systems of ventilation) problems on ventilation
	3RD	2ND		INTERNAL
		3RD		5.7 Mechanical Services- Lifts, Escalator, Elevators - types and uses. Discussion classes
				6.1 Planning and selection of construction equipments
				6.2 Study on earth moving equipments like drag line, tractor, bulldozer, Power

M	3RD		UNIT-6	shovel	
		4TH		6.3 Study and uses of compacting equipments like tamping rollers, Smooth wheel rollers, Pneumatic tired rollers and vibrating compactors	
				6.4 Owning and operating cost – problems. Revision classes	
	4TH	1ST	UNIT-7	Soil reinforcing techniques	
		2ND		7.1 Necessity of soil reinforcing.	
		3RD		7.2 Use wire mesh and geo-synthetics	
		4TH		7.3 Strengthening of embankments, Slope stabilization in cutting and embankments	
	5TH	2ND		Revision classes	
				Discussion	
	JUNE	1ST		3RD	Question and Answer Discussion
				4TH	Practice long question and answer
		2ND		1ST	Question and Answer Discussion
				2ND	do
3RD				Class Test-2	
4TH				Previous year question answer discssion	
3RD		4TH		do	
4TH		1ST		do	
		2ND		Short type questions discussion	
		3RD		do	
		4TH		Long question discussion	
5TH		1ST		do	
		2ND		do	

H.O.D
SIGNATURE

Academic co-ordinator Signature

SUBJECT EXPERT
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