

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN-2020/21(SUMMER)

Discipline : CIVIL ENGG.		Semester: 6th Sem		Name of the Teaching Faculty :DAMAYANTI PRADHAN	
Subject : ACT&E(Th.3)		per week class allotted : 04		Semester From date : 05.04.2021 To Date : 30.06.2021	
Month	Week	Day	Unit	Topics	
APRIL	4TH	1ST	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	
	5TH	1ST		1.3 Miscellaneous materials – Properties and uses of acoustics materials, wall claddings, plaster boards, micro-silica, artificial sand, bonding agents, adhesives etc.	
		3RD		Question and Answer Discussion	
				Do	
		5TH		Question Discussion	
MAY	2ND	1ST	UNIT-2	Prefabrication	
				2.1 Introduction, necessity and scope of prefabrication of buildings, history of prefabrication, current uses of prefabrication , types of prefabricated systems.	
		3RD		2.2 The theory and process of prefabrication, design principle of prefabricated systems, types of prefabricated elements, modular coordination	
		5TH		2.3 Indian standard recommendation for modular planning.	

MAY	3RD	1ST	UNIT-2	Question discussion
		3RD		Question discussion
		4TH		Class test-1
	4TH	1ST	UNIT-3	Earthquake Resistant Construction
		3RD		3.1 Building Configuration
		5TH		3.2 Lateral Load resisting structures
	5TH	1ST		3.3 Building characteristics
		5TH		3.4 Effect of structural irregularities-vertical irregularities, plan configuration
	1ST	1ST		3.5 Safety consideration during additional construction and alteration of existing
		3RD		3.6 Additional strengthening measures in masonry building-corner reinforcement, lintel band, sill band, plinth band, roof band, gable band etc.
		5TH		Question and answer Discussion
		5TH		Question and answer Discussion
JUNE	1ST	5TH	UNIT-4	Retrofitting of Structures
		1ST		4.1 Seismic retrofitting of reinforced concrete buildings :
		3RD		4.2 -Sources of weakness in RC frame building
	2ND	1ST		4.3 -Classification of retrofitting techniques and their uses
		3RD		Question and answer Discussion
		5TH		
	3RD	1ST	UNIT-5	Building Services
		3RD		5.1 Cold Water Distribution in high rise building, lay out of installation
		5TH		5.2 Hot water supply – General principles for central plants-layout
	4TH	1ST		5.3 Sanitation –soil and waste water installation in high rise buildings
		3RD		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
		5TH		5.5 Lighting – Requirement of lighting, Measurement of light intensity
		6TH		5.6 Ventilation - Methods of ventilation (Natural and artificial Systems of ventilation)
		1ST		INTERNAL
	5TH	1ST		5.7 Mechanical Services- Lifts, Escalator, Elevators – types and uses.

JULY	5TH	3RD	UNIT-6	6.1 Planning and selection of construction equipments
	1ST	5TH		6.2 Study on earth moving equipments like drag line, tractor, bulldozer etc.
		1ST		6.3 Study and uses of compacting equipments like tamping rollers, Smooth wheel rollers, Pneumatic tired rollers and vibrating compactors
	2ND	3RD	UNIT-7	Soil reinforcing techniques
		5TH		7.1 Necessity of soil reinforcing.
		1ST		7.2 Use wire mesh and geo-synthetics
	3RD	3RD		7.3 Strengthening of embankments, Slope stabilization in cutting and embankments
		5TH		Revision classes
	4TH	1ST		Discussion
		5TH		Question and Answer Discussion
	5TH	1ST		Practice long question and answer
				Question and Answer Discussion
		3RD		do
		5TH		Class Test-2
		6TH		Previous year question answer discssion
				do
				Short type questions discussion
				do
				Long question discussion
				do
				Revision previous year questions.

SUBJECT EXPERT SIGNATURE

H.O.D SIGNATURE

ACADEMIC CO-ORDINATOR SIGNATURE