

GOVT. POLYTECHNIC MAYURBHANJ

LESSON PLAN- 2021/22 (SUMMER)

Discipline : CIVIL ENGG.		Semester: 6th	Name of the Teaching Faculty :SUBHASHMITA NAIK	
Subject : CONSTRUCTION MANAGEMENT (TH.2)		No. of Days / per week class allotted : 04	Semester From date : 10.03.2022	To Date : 10.06.2022
MONTH	Week	Day	Unit	Topics
MARCH	2ND		UNIT-I	Introduction To Construction Management
		4TH		Aims and objectives of construction management.
		5TH		Functions of construction management.
		1ST		The construction team components owner, engineer, architect,contractor-their functions and interrelationship and jurisdiction.
		2ND		Resources for construction management-men,machines,materials,money
	3RD		UNIT-II	Constructional Planning
		4TH		Importance of Construction Planning, Developing work breakdown structure for construction work ,
		1ST		Construction Planning stages-Pre-tender stage, Post-tender stage.
		2ND		Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works. Preparation of schedules for labour materials,machinery, finance for small works
	4TH		UNIT-II	Limitation of Bar charts, Construction scheduling by network techniques-definition of terms ,PERT and CPM techniques, advantages and disadvantages of two techniques
		4TH		network analysis, estimation of time and critical path, application of PERT and CPM techniques in sample construction works.
		5TH		
	5TH	1ST	UNIT-III	Problem solved by using PERT & CPM
		2ND		Problem solved by using PERT & CPM
		4TH		Materials and Stores Management
			UNIT-III	Classification of Stores-storage of stock. Issue of materials-indent , Invoice, bin card
				Construction Site Management
				Job Lay out-Objectives, Review plans, specifications, Lay out of equipments.
	2ND	1ST	UNIT-IV	Location of equipment, organizing labour at site.
		2ND		

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	4TH		Job lay out for different construction sites.	
	5TH		Principle of storing material at site.	
	1ST		Construction Organization: Introduction – Characteristics, Structure, Importance. Organization types-line and staff, functions and their characteristics Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task. Leadership- necessity, styles of leadership, role of leader Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, mob psychology, handling of grievances, absenteeism, labour welfare. Conflicts in organization-genesis of conflicts, types-Intrapersonal, interpersonal, intergroup, resolving conflicts.	
3RD	2ND	UNIT-V		
	1ST			
4TH	2ND			
	4TH		UNIT-VI	Construction Labour and Labour Management: Preparing Labour schedule Essential steps for optimum labour output, Labour characteristics, Wages & their payment, Labour incentives, Motivation - Classification of motives, different approaches to motivation.
	5TH			
	1ST			
	2ND	UNIT-VII	Equipment Management Preparing the equipment schedule, Identification of different alternative equipment Importance of Owning & operating costs in making decisions for hiring & purchase of equipment Inspection and testing of equipment, Equipment maintenance	
	4TH			
5TH				
1ST	1st	UNIT-VIII		
	4TH		Quality Control Concept of quality in construction, Quality Standards- during construction, after construction, destructive & non destructive methods.	
	5TH			
2ND	1ST	UNIT-IX	Monitoring Progress Monitoring Progress Programme and progress of work, Work study, Analysis and control of physical and financial progress corrective measures.	
	2ND			
	4TH		UNIT-X	Safety Management In Construction Importance of safety, auses and effects of accidents in construction works
5TH				
2ND				
3RD	2ND		Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition. Development of safety consciousness Safety legislation- Workman's compensation act, contract labour act.	
	4TH			
	5TH			
	1ST		Role of Vulnerability Atlas of India in construction projects Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. Definition of disaster related terms.	
	2ND			
	4TH		Earthquake hazard and vulnerability, Magnitude and intensity scales of earthquake, seismic zones, earthquake hazard maps, types of structures and damage classification, effects in housing and resistant measures.	

JUNE	UNIT-XI		Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
	5TH	5TH	Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction.
	2ND	4TH	Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
	1ST	5TH	Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents
	2ND	1ST	REVISION
		2ND	REVISION
		4TH	PREVIOUS YEAR QUESTION DISCUSSION
	5TH		PREVIOUS YEAR QUESTION DISCUSSION

S. D. Singh
Subject 10/03/22
Expert

S. D. Singh
HOD 10/03/22
Civil Department

Academic
Co-ordinator