

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

Discipline : CIVIL ENG.		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 : 25.01,2021	To Date : 30.04,2021
MONTH	Week	Day	Unit	Topics
JANUARY	5TH	1ST	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
	1ST	4TH	UNIT-II	Constructional Planning
		5TH		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
		5TH		Limitation of Bar charts,Construction scheduling by network techniques-definition of terms ,PERT and CPM techniques, advantages and disadvantages of two techniques
FEBRUARY	2ND	1ST	UNIT-III	network analysis, estimation of time and critical path, application of PERT and CPM techniques in sample construction works.
		2ND		Problem solved by using PERT & CPM
		4TH		Problem solved by using PERT & CPM
		5TH		Materials and Stores Management
		1ST		Classification of Stores-storage of stock.
	3RD	4TH	UNIT-III	Issue of materials-indent , invoice, bin card
		5TH		

MARCH	4TH	1ST	UNIT-IV	Construction Site Management Job Lay out-Objectives, Review plans, specifications, Lay out of equipments. Location of equipment, organizing labour at site. Job lay out for different construction sites. Principle of storing material at site.
		2ND		
		4TH		
		5TH		
		1ST		
	1ST	2ND		INTERNAL ASSESSMENT Construction Organization: Introduction – Characteristics, Structure, importance. Organization types-line and staff, functions and their characteristics
		4TH		
		5TH		
		1ST		
		2ND		
	2ND	5TH	UNIT-V	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.
		1ST		
		2ND		
		4TH		
		5TH		
	3RD	1ST		Conflicts in organization-genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts. Construction Labour and Labour Management: Preparing Labour schedule
		4TH		
		5TH		
		1ST		
		2ND		
	4TH	5TH	UNIT-VI	Essential steps for optimum labour output, Labour characteristics, Wages & their payment, Labour incentives, Motivation- Classification of motives, different approaches to motivation. Equipment Management Preparing the equipment schedule, Identification of different alternative equipment
		1ST		
		2ND		
		4TH		
		5TH		
	5TH	1ST	UNIT-VII	Importance of Owning & operating costs in making decisions for hiring & purchase of equipment Inspection and testing of equipment, Equipment maintenance Quality Control Concept of quality in construction, Quality Standards- during construction, after construction, destructive & non destructive methods.
		2ND		
		4TH		
		5TH		
		1ST		
	1ST	2ND	UNIT-VIII	Monitoring Progress Monitoring Progress Programme and progress of work, Work study, Analysis and control of physical and financial progress corrective measures.
		4TH		
		5TH		
		1ST		
		2ND		
		4TH	UNIT-IX	
		5TH		
		1ST		
		2ND		
		4TH		

APRIL

2ND	2ND	UNIT-X	Safety Management in Construction
	4TH		Importance of safety, causes and effects of accidents in construction works
	5TH		Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition.
	1ST		Development of safety consciousness
	2ND		Safety legislation- Workman's compensation act, contract labour act.
3RD	4TH	UNIT-XI	Role of Vulnerability Atlas of India in construction projects
	5TH		Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. Definition of disaster related terms.
	1ST		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.
	2ND		Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
4TH	4TH	UNIT-XI	Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction.
	5TH		Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami, hazards. Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents

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Subject
Expert

[Signature]
HOD 25/01/21
Civil Department

Academic
Co-ordinator