

ACADEMIC SESSION : SUMMER 2025

Discipline : Civil Engg.	Semester : 6 th	Name of the Teaching Faculty : SRI PADMA LOCHAN BEHERA, SR.LECTURER(CIVIL)
Subject : CONSTRUCTION MANAGEMENT	No. of days / week class allotted:4	Semester From date: 04/02/2025 to 17/05/2025 Nos. of Weeks : 15
Week	Class Day	Theory/ Practical Topics
1	1 st	Aims and objectives of construction management Functions of construction management
	2 nd	The construction team component owner, engineer, architect, contractor-their functions and interrelationship and jurisdiction
	3 rd	Resources for construction management-men,machines,materials,Money
	4 th	Importance of Construction Planning, Developing work breakdown structure for construction work
2	1 st	ConstructionPlanningstages-Pre-tenderstage,Post-tenderstage
	2 nd	ConstructionschedulingbyBarcharts-preparationofBar Chartsfor simple constructionworks, LimitationofBar charts
	3 rd	Preparationofschedulesforlabourmaterials,machinery,financeforsmallworks
	4 th	Construction scheduling by network techniques-defination of terms, PERT and CPM techniques
3	1 st	advantages and disadvantages of two techniques, network analysis
	2 nd	Estimation of time and critical path
	3 rd	Application of PERT and CPM techniques in sample construction works
	4 th	Numericals on PERT & CPM
4	1 st	Classification of Stores-storage of stock
	2 nd	Issue of materials-indent, invoice, bincard
	3 rd	Job Layout-Objectives, Review plans, specifications, Layout of equipments
	4 th	Location of equipment, organizing labour at site
5	1 st	Job lay out for different construction sites
	2 nd	Principle of storing material at site
	3 rd	Introduction-Characteristics, Structure, importance
	4 th	Organization types-line and staff, functions and their characteristics
6	1 st	Principles of organization-meaning and significance of terms- control, authority, responsibility, job& task
	2 nd	Leadership-necessity, styles of leadership, role of leader
	3 rd	Human relations-relations with subordinates, Supervisors, characteristics of group behaviour, mob psychology, handling of grievances, absenteeism, labour welfare
	4 th	Conflicts in organization-genesis of conflicts, types- intrapersonal, interpersonal, intergroup, resolving conflicts
7	1 st	Class Test
	2 nd	Preparing Labour schedule, Essential steps for optimum labour output
	3 rd	Labour characteristics, Wages &their payment, Labour incentives

8	4 th	Motivation-Classification of motives, different approaches to Motivation
	1 st	Preparing the equipment schedule
	2 nd	Identification of different alternative equipment
	3 rd	Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
9	4 th	Inspection and testing of equipment
	1 st	Equipment maintenance
	2 nd	Concept of quality in construction
	3 rd	Quality Standards-during construction
10	4 th	Quality Standards-after construction
	1 st	Quality Standards-destructive methods
	2 nd	Quality Standards-non destructive methods
	3 rd	Programme and progress of work
11	4 th	Methods of recording progress of work
	1 st	Analysis of progress
	2 nd	Productivity analysis & work study
	3 rd	Time study of work measurements
12	4 th	Importance of safety, causes and effects of accidents in construction works
	1 st	Safety measures in worksites for excavation, scaffolding
	2 nd	Safety measures in work sites for formwork, fabrication
	3 rd	Safety measures in worksites for erection, demolition
13	4 th	Development of safety consciousness
	1 st	Safety legislation-Workman's compensation act
	2 nd	Safety legislation-contract labour act
	3 rd	Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. Definition of Disaster related terms
14	4 th	Earthquake hazard and vulnerability, Magnitude and intensity scales of earthquake, seismic zones, earthquake hazard maps,
	1 st	types of structures and damage classification, effects in housing and resistant measures.
	2 nd	Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone Resistant measure
	3 rd	Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction
15	4 th	Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunder storm incidence maps, Measures against Tsunami hazards.
	1 st	Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.
	2 nd	Class Test
	3 rd	Previous semester Question Discussion
	4 th	Previous semester Question Discussion

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