

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN Session-2024-2025

Semester: 6th Discipline: CIVIL Engg.

Subject: CONSTRUCTION MANAGEMENT

Name of the Teaching Faculty: RAJESH KUMAR SAHU

Subject: CONSTRUCTION MANAGEMENT No. of Days/per week class allotted : 04

Semester From Date : 04-02-25 To Date: 17-05-25 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
1	1st	Introduction: Aim and Objective of const. Management Function of Construction Management
	2nd	Construction team component, Owner, Engineer, Architect, Contractors and their functions & interrelationship and jurisdiction
	3rd	Resources for construction management, M.en, Machines, materials and money
	4th	Construction planning, important, Develops work, Breakdown structure
2	1st	Construction planning stages: Pre tender stage. Post tender stage
	2nd	Construction scheduling by bar charts, preparation of bar chart
	3rd	Preparation of schedule for labour materials, machinery, Finance & small works.
	4th	Limitation of bar charts
3	1st	Construction scheduling by network techniques, Definition of terms.
	2nd	PERT & CPM techniques, advantages & disadvantages of two techniques.
	3rd	Network analysis, Estimation of time and critical path.
	4th	Application of PERT & CPM.

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Week	Class Day	Theory /Practical Topics
4	1st	Materials & Store management classification of stores : storage of stock, issues of materials, invents, invoice, Bin card
	2nd	Construction site Management: Job layout, objectives, review plan, specification, layout of equipments
	3rd	Location of equipment, organizing labour at site, Job layout of diff. const. sites, principle of storing material at site
	4th	Construction organization, introduction - characteristics, structure importance
5	1st	organization types, Line & staff, Function & their characteristics
	2nd	Principle of organization, Meaning & significance of term control, authority, responsibility, Job & task
	3rd	Leadership: necessity, styles of leadership, role of leader
	4th	Human relations: Relations with subordinates, peers, Supervisors, characteristics & group behaviour.
6	1st	Job psychology, handling of grievance, absenteeism ; Labour welfare
	2nd	Conflicts in organization, genesis of conflicts, types. intrapersonal, interpersonal, intergroup.
	3rd	Resolving conflicts, Construction Labour & Labour Management, Preparing Labour & Schedule
	4th	Essential steps for optimum labour output Labour characteristics, LO Agers & their payments

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Subject: CONSTRUCTION MANAGEMENT No. of Days/per week class allotted: 054

Semester From Date: 04-02-25 To Date: 17-05-25 No. of Weeks: 15

Week	Class Day	Theory / Practical Topics
7	1st	Labour intensities Motivation: - Classification of motives, diff approaches of motivation
	2nd	Equipment management: preparing the equipment schedule, Identification, importance of owning & operating cost of making
	3rd	Decision of hiring and purchase of equipment, inspection & testing of equipment, Equipment maintenance
	4th	Quality control: concept of quality control.
8	1st	Quality standards: During construction. After construction, Destructive & non destructive methods.
	2nd	Monitoring process: Prog. & progress of work
	3rd	work study
	4th	Analysis and control of physical & functional programme, corrective measures.
9	1st	Safety measurement in construction (importance of safety) Causes & effects of accidents in construction work
	2nd	Safety measures in work sites for excavation
	3rd	Scaffolding, Formwork, Fabrication
	4th	Erection Demolition

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Subject: CONSTRUCTION MANAGEMENT No. of Days/per week class allotted : 04

Semester From Date : 04-02-20 To Date: 17-05-25 No. of Weeks : 15

Week	Class Day	Theory / Practical Topics
10	1st	Development of safety
	2nd	Cause & effects of accident & construction work
	3rd	Safety measures in work sites for excavation
	4th	Scaffolding, formwork
11	1st	fabrication & erection
	2nd	Demolition
	3rd	Development of safety consciousness
	4th	Safety legislation: workman's compensation act
12	1st	Central labour act
	2nd	Roll of vulnerability atlas of India
	3rd	Concepts of natural hazards & disasters
	4th	Vulnerability profile of India

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Subject: CONSTRUCTION MANAGEMENT No. of Days/per week class allotted : 04

Semester From Date : 04-02-25 To Date: 17-05-05 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
13	1 st	Definition of disaster related terms
	2 nd	Earthquake hazard & vulnerability
	3 rd	Magnitude & Intensity scale of earthquake Seismic zone
	4 th	Earthquake hazard map. Types of structure and damage classification
14	1 st	Effects in housing & resistant measures
	2 nd	Wind/Cyclone hazards. and vulnerability, Wind speed and pressure, wind hazard & cyclone occurrence map
	3 rd	Storm surveys and cyclone resistance measures.
	4 th	Flood hazard & vulnerability, flood hazard and flood prone areas of country, general protection of habitants.
15	1 st	Flood resistance construction Land slides, Tsunamis and thunderstorm hazards & vulnerability
	2 nd	Land slide and thunderstorm incidence maps, measures against Tsunami hazards
	3 rd	Housing vulnerability risk tables and usage of vulnerability atlas of India
	4 th	Inclusion of vulnerability atlas in tender documents

Prakash Kumar Sahu
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