

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN Session-2022-2023

Discipline: CIVIL ENGINEERING Engg. Semester: 6th

Name of the Teaching Faculty: RAJESH KUMAR SAHU

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

Semester From Date : 14.02.2023 To Date : 23.05.2023 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
1	1 st	Introduction: Aim and objective of Construction management. Function of construction management.
	2 nd	Construction team components, owner, engineer, architect, contractor and their function and interrelationship and jurisdiction.
	3 rd	Resources for construction management: Men, machines, materials and money.
	4 th	Construction planning: Importance, Develops work, breakdown structure.
2	1 st	Constr. planning: Importance, Develops work, pre-tender stage, post tender stage.
	2 nd	Construction scheduling by bar charts. preparation of bar chart.
	3 rd	Preparation of schedule for labour materials, machinery, finance and small works.
	4 th	Limitation of bar charts.
3	1 st	Construction scheduling by network technique, definition, of terms.
	2 nd	PERT & CPM techniques. advantages, & disadvantages of two technique.
	3 rd	Network analysis, Estimation of time and critical path.
	4 th	Application of PERT and CPM.

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Subject: CONSTRUCTION MANAGEMENT No. of Days/per week class allotted 05

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Week	Class Day	Theory /Practical Topics
4	1 st	Materials and Stone management Classification of stores: storages of stock, issue of materials, indent, invoice, bin card.
	2 nd	Construction site management: Job layout objectives, review plans, specifications, layout of equipments.
	3 rd	Location of equipment organizes labour at site, Job layout for diff. const. sites, principle of storing material at site.
	4 th	Construction organization, Introduction + Characteristics, Structure, Importance.
5	1 st	Organization types, Line and Staff, function and their characteristics.
	2 nd	Principle of organization: Meaning & significance of term. Control, authority, responsibility, job & task.
	3 rd	Leadership: necessity, style of leadership, role of leader.
	4 th	Human relation: Relation with subordinates, peers, Supervisors, Characteristics of group behaviour.
6	1 st	Job psychology, handling of grievance, absenteeism, Labour welfare.
	2 nd	Conflicts in organization, genesis of conflicts, types, Intrapersonal, interpersonal, intergroup.
	3 rd	Resolving conflicts, Construction labour & Labour management, preparing labour schedule.
	4 th	Essential steps for optimum labour output. Labour characteristics - wages and their payments.

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Week	Class Day	Theory /Practical Topics
7	1 st	labour intensities motivation: classification of motives, diff. approaches of motivation.
	2 nd	Equipment management: prepares the equipment schedule. Identification, Importance of owner & operator cost of making.
	3 rd	Decision of hiring and purchase of equipment, Inspection and testing of equipment, Equipment maintenance
	4 th	Quantity control: Concept of quantity in construction.
8	1 st	Quality standards: during construction, after construction, destructive and non-destructive methods.
	2 nd	monitors progress: Programme, and progress of work
	3 rd	work study.
	4 th	Analysis and control of physical and financial program Corrective measures.
9	1 st	Safety management in construction:- Importance of safety, causes & effects of accidents in construction works.
	2 nd	Safety measures in work sites for excavation.
	3 rd	scaffolding, formwork, fabrication.
	4 th	Erection, Dismantling.

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Week	Class Day	Theory /Practical Topics
10	1 st	Development of safety
	2 nd	Cause and effects of accidents in construction works.
	3 rd	Safety measures in work sites for excavation.
	4 th	Scaffolding, formwork.
11	1 st	Fabrication and erecting
	2 nd	demolition
	3 rd	Development of Safety Consciousness
	4 th	Safety legislation: - Workmen's Compensation act
12	1 st	Contract Labour act
	2 nd	Role of vulnerability atlas of India.
	3 rd	Concept of natural hazards and disasters.
	4 th	Vulnerability profile of India.

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Week	Class Day	Theory /Practical Topics
13	1st	Definition of disaster related terms.
	2nd	Earthquake hazard and vulnerability.
	3rd	Magnitude and intensity scales of earthquake, seismic zones.
	4th	Earthquake hazard maps, Types of structures and damage classification.
14	1st	Effects on housing and resistant measures.
	2nd	wind/cyclone hazard and vulnerability, windspeed and pressure, wind hazard and cyclone occurrence maps.
	3rd	Storm surveys and cyclone resistant measures.
	4th	Flood hazard and vulnerability, flood hazard and flood prone areas of country, General protection of inhabitants.
15	1st	Flood resistance construction Land slides, Tsunamis and thunderstorm hazards & vulnerability
	2nd	Land slide and thunderstorm incidence maps. measures against Tsunami hazards.
	3rd	Housing vulnerability risk tables and usage of Vulnerability atlas of India.
	4th	Inclusion of vulnerability atlas in Tender documents

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