

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN Session-2023-2024

Discipline: CIVIL Engg. Semester: 6th

Subject: CONSTRUCTION MANAGEMENT

Name of the Teaching Faculty: PAJESHI KUMAR SAHU

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

Semester From Date : 16-01-2024 To Date : 26-04-2024 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, Contractors 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	Const. planning stages:- 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 techniques, definition of terms
	2 nd	PERT & CPM techniques, advantages & disadvantages of two techniques.
	3 rd	Network analysis, estimation of time and critical path.
	4 th	Application of PERT and CPM.

Rajesh Kumar Sahu
Signature of the Faculty

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

Semester From Date : 16-01-2024 To Date : 26-04-2024

No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
4	1 st	Materials and store management Classification of stores : storage 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, organizing labours at site, Job layout for diff. construction 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, styles of leadership, role of leader.
	4 th	Human relations: - Relations with sub-ordinates, peers, supervisors, characteristics of group behaviours.
6	1 st	lab psychology, handling of grievances, absenteeism, Labour welfare.
	2 nd	Conflicts in organisation, 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 payment

Rajesh Kumar Sahu
Signature of the Faculty

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

Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
7	1st	Labour intensities Motivation - Classification of motives, different approach of motivation.
	2nd	Equipment management: Preparing the equipment schedule. Identification, importance of owning & operating cost of making
	3rd	Decision of hiring and purchase of equipments, Inspection and testing of equipment, Equipment maintenance.
	4th	Quality control: Concept of quality in construction.
8	1st	Quality standards: During construction, after construction, destructive and non destructive methods.
	2nd	Monitoring progress: Programme & progress of work.
	3rd	work study.
	4th	Analysis and control of physical and financial program Corrective measures.
9	1st	Safety management in construction: - Importance of safety, causes and effects of accidents in construction works.
	2nd	Safety measures in work sites for excavation.
	3rd	Scaffolding, formwork, fabrication
	4th	Erection, Demolition.

Pajesh Kumar Sahu
Signature of the Faculty

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

Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
10	1st	Development of safety
	2nd	Causes and affects of accidents in construction works.
	3rd	safety measurement in work sites for excavation.
	4th	scaffolding , formwork .
11	1st	Fabrication and erection
	2nd	demolition
	3rd	Development of safety consciousness
	4th	Safety legislation: - workman's compensation act
12	1st	Contract labour act
	2nd	Roll of vulnerability atlas of India
	3rd	Concepts of natural hazards & disasters.
	4th	Vulnerability profile of India

Prajesh Kumar Sahu
Signature of the Faculty

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

Semester From Date : 16-01-2024 To Date : 26-04-2024

No. of Weeks : 15

Week	Class Day	Theory / Practical Topics
13	1st	Definition of disaster related terms.
	2nd	Earthquake hazard and vulnerability.
	3rd	Magnitude and intensity scale of earthquake. Seismic zone.
	4th	Earthquake hazard maps, Types of structures and damage classification.
14	1st	Effects in housing & resistant measures.
	2nd	Wind / cyclone hazard and vulnerability, wind speed and pressure, wind hazard & cyclone / hurricane maps.
	3rd	Storm surveys and cyclone resistant measures
	4th	Flood hazard and vulnerability, flood hazard and flood prone areas of country, General protection of habitants
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

Rajesh Kumar Sahu
Signature of the Faculty