

R.K INSTITUTE OF ENGINEERING AND TECHNOLOGY CUTTACK

LESSONPLAN

BRANCH-CIVIL ENGG.

SUBJECT-CONSTRUCTION MANAGEMENT

FACULTY NAME- PRITICHANDRA ACHARYA

SEMESTER FROM DATE -22.12.25 TO DATE 18.4.26

SEMESTER-4TH

YEAR-2025-26

WEEK	CLASS DAY	TOPIC TO BE COVERED	NO OF CLASSES	REMARKS (IF ANY)
1	1	Introduction To Construction Management. Aims and objectives of construction management Functions of construction management	01	
		The construction team components owner, engineer, architect .contractor their functions and interrelationship and jurisdiction. Resources for construction management-men ,machines ,materials. money	01	
		Constructional Planning. Importance of Construction Planning Developing work breakdown structure for construction work Construction Planning stages-Pre-tender stage, Post-tender stage.	01	
		Construction scheduling by Bar charts- preparation of Bar Charts for simple construction works. Preparation of schedules for labour materials, machinery, finance for small works	01	
2	2	The construction team components owner.engineer, architect,contractor their functions and interrelationship and jurisdiction. Resources for construction management-men,machines materials, money	01	
		Constructional Planning. Importance of Construction Planning Developing work breakdown structure for construction work		
		Construction Planning stages-Pre-tender stage, Post-tender stage Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works. Preparation of schedules for labour materials, machinery, finance for small works	01	
		Limitation of Bar charts. Construction scheduling by network techniques definition of terms PERT and CPM techniques, advantages	01	

		and disadvantages of two techniques, network analysis, estimation of time and critical path		
		application of PERT and CPM techniques in sample construction works		
		Materials and Stores Management. Classification of Stores-storage of stock		
		Issue of materials-indent, invoice, bin card	04	
		Construction Site Management. Job Lay out- Objectives, Review plans. specifications. Lay out of equipments. Location of equipment, organizing labour at site.		
3	3	.QUESTION DISCUSSION	01	
		REVISSION	01	
4	4	QUESTION DISCUSSION	02	
		Job lay out for different construction sites. Principle of storing material at site	01	
		REVISSION	01	
		CLASS TEST	01	
5	5	QUESTION DISCUSSION	01	
		QUESTION DISCUSSION	01	
		Job lay out for different construction sites. Principle of storing material at site.	01	
		REVISSION	01	

		Construction Organization: Introduction Characteristics, Structure, importance. Organization types-line and staff, functions and their characteristics	01	
		QUESTION DISCUSSION	01	
		Principles of organization- meaning and significance of terms-control, authority, responsibility, job & task		
6	6	Leadership-necessity	01	
		styles of leadership, role of leader Human relations- relations with subordinates, peers, Supervisors	01	
		characteristics of group behavior, mob psychology, handling of grievances, absenteeism, labour welfare	01	
		Conflicts in organization-genesis of conflicts, types- intrapersonal, interpersonal, intergroup, resolving conflicts.	01	
		Labour and Labour Management: Preparing Labour schedule.	01	
		Essential steps for optimum labour output Labour characteristics.	01	
7	7	Wages & their payment	01	
		Labour incentives. Motivation-Classification of motives, differens approaches to motivation	01	
		7. Equipment Management. Preparing the equipment schedule Identification of different alternative equipment	01	
		Importance of Owning & operating costs in making decisions for hiring & purchase of equipment	01	
		Inspection and testing of equipment. Equipment maintenance	01	
8	8	Quality Control Concept of quality in construction. Quality Standards- during construction, after construction	01	

		Quality Standards- destructive & non destructive methods	02	
9	9	Monitoring Progress: Programme and progress of work Work study	02	
		Analysis and control of physical and financial progress corrective measures.	02	
		Safety Management In Construction: Importance of safety. causes and effects of accidents in construction works	02	
10	10	Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition. Development of safety consciousness	01	
		Safety legislation- Workman's compensation act, contract labour act.	01	
		.Role of Vulnerability Atlas of India in construction projects. Introduction to Vulnerability Atlas of India,	01	
		Introduction to Vulnerability Atlas of India,	01	
		Concepts of natural hazards and disasters and vulnerability profile of India	01	
11	11	Definition of disaster related terms	01	
		Magnitude and intensity scales of earthquake, seismic zones,	01	
		Earthquake hazard maps	01	
		Types of structures and damage classification, effects in housing and resistant measures.	01	
		Wind/Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures. Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant constructionssss	01	

		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 document	01	
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SUBJECT
EXPERT