

BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK
DEPARTMENT OF CIVIL ENGINEERING



LESSON PLAN

SUBJECT: CONSTRUCTION MANAGEMENT (TH 2)

FACULTY: MR. SURAJ KUMAR NAYAK

ACADEMIC SESSION: 2023-24

SEMESTER: 6TH

SEC: C

Sd/-
HOD (Civil Engg.)

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Discipline: Civil Engineering	Semester: 6th Sec: C		Name of Teaching Faculty: MR. SURAJ KUMAR NAYAK
Subject: CONSTRUCTION MANAGEMENT	No. of Days / week class allotted: 04 period per week (MON—1P, TUE-1P, FRI-1P)		Semester From Date : 16-01-2024 To Date 26-04-2024 No. of Weeks: 15
Week	Date	No. of periods available	Topics to be covered
1ST	16/01/2024	1	1 Introduction To Construction Management: 1.1 Aims and objectives of construction management. 1.2 Functions of construction management.
	19/01/2024	2	1.3 The construction team components owner,engineer,architect, contractor-their functions and interrelationship and jurisdiction. 1.4 Resources for construction management-men,machines,materials,money.
2ND	22/01/2024	1	2 Constructional Planning 2.1 Importance of Construction Planning 2.2 Developing work breakdown structure for construction work 2.3 Construction Planning stages-Pre-tender stage, Post-tender stage 2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple

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			construction works. 2.5 Preparation of schedules for labour materials
3RD	23/01/2024	1	2.5 machinery, finance for small works. 2.6 Limitation of Bar charts.
	30/01/2024	1	2.7 Construction scheduling by network techniques-definition of terms ,PERT and CPM techniques, advantages and disadvantages of two techniques, network analysis, estimation of time and critical path, application of PERT and CPM techniques in sample construction works.
	02/02/2024	2	3 Materials and Stores Management 3.1 Classification of Stores-storage of stock. 3.2 Issue of materials-indent , invoice, bin card.
4TH	05/02/2024	1	4 Construction Site Management 4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipment. 4.2 Location of equipment, organizing labour at site.
	06/02/2024	1	4.3 Job lay out for different construction sites.
	09/02/2024	2	4.4 Principle of storing material at site.
5TH	12/02/2024	1	5 Construction Organization: 5.1 Introduction – Characteristics, Structure, importance.

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			5.2 Organization types-line and staff, functions and their characteristics
	13/02/2024	1	5.3 Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task 5.4 Leadership-necessity, styles of leadership, role of leader.
	16/02/2024	2	5.5 Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior. 5.5 mob psychology, handling of grievances, absenteeism, labour welfare.
6TH	19/02/2024	1	5.6 Conflicts in organization-genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts.
	20/02/2024	1	6 Construction Labour and Labour Management: 6.1 Preparing Labour schedule 6.2 Essential steps for optimum labour output
	23/02/2024	2	Monthly Class Test 1
7TH	26/02/2024	1	6.3 Labour characteristics 6.4 Wages & their payment
	27/02/2024	1	6.5 Labour incentives 6.6 Motivation- Classification of motives, different approaches to motivation.
	01/03/2024	2	7 Equipment Management 7.1 Preparing the equipment schedule 7.2 Identification of different alternative equipment.
8 th	04/03/2024	1	7.3 Importance of Owning & operating costs in making,

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			decisions for hiring & purchase of equipment.
9TH	11/03/2024	1	7.4 Inspection and testing of equipment. 7.5 Equipment maintenance.
	12/03/2024	1	8 Quality Control 8.1 Concept of quality in construction. 8.2 Quality Standards- during construction.
	15/03/2024	2	8.2 After construction, destructive & non-destructive methods.
10TH	18/03/2024	1	9 Monitoring Progress 9.1 Programme and progress of work. 9.2 Work study.
	19/03/2024	1	10 Safety Management In Construction 10.1 Importance of safety 10.2 causes and effects of accidents in construction works
	22/03/2024	2	10.2 causes and effects of accidents in construction works
11TH	26/03/2024	1	10.5 Safety legislation- Workman's compensation act, contract labour act.
	29/03/2024	2	11 Role of Vulnerability Atlas of India in construction projects 11.1 Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India.
12TH	02/04/2024	1	INTERNAL ASSESSMENT
	05/04/2024	2	INTERNAL ASSESSMENT

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13TH	08/04/2024	1	11 Role of Vulnerability Atlas of India in construction projects 11.1 Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. 11.1 Definition of disaster related terms.
	09/04/2024	1	. 11.2 Earthquake hazard and vulnerability, Magnitude and intensity scales of earthquake, seismic zones
	12/04/2024	2	11.2 earthquake hazard maps, types of structures and damage classification, effects in housing and resistant measures. 11.3 Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps.
14TH	15/04/2024	1	11.3 storm surveys and cyclone resistant measures 11.4 Flood hazard and vulnerability
	16/04/2024	1	Monthly Class Test 2
	19/04/2024	2	11.4 Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction. 11.5 Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
15TH	22/04/2024	1	11.5 Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
	23/04/2024	1	11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.
	26/04/2024	2	Revision

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16 th	30/04/2024	2	Previous Year Questions and Answers discussion
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