

BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK
DEPARTMENT OF CIVIL ENGINEERING



LESSON PLAN

SUBJECT: CONSTRUCTION MANAGEMENT (TH 2)

FACULTY: SONALIRANI PADHIARI

ACCADEMIC SESSION: 2022-23

SEMESTER: 6TH

SEC: B

Sd/-
H O D (Civil Engg.)

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Discipline: Civil Engineering	Semester: 6th		Name of the teaching faculty: SONALIRANI PADHIARI
Subject: Construction Management	No. of Days/ per week class allotted: 04 period per week. (Tue-1,Wed-1,Thu-1,Fri-1 period)		Semester From Date: 14-02-2023 To Date: 23-05-2023 No. of weeks: 15 weeks
Week	Class Day	No of period available	Theory Topics
1ST	14/02/2023	1	1 INTRODUCTION TO CONSTRUCTION MANAGEMENT: 1.1 Aims and objectives of construction management. 1.2 Functions of construction management.
	15/02/2023	1	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.
	16/02/2023	1	2 CONSTRUCTIONAL PLANNING: 2.1 Importance of Construction Planning. 2.2 Developing work breakdown structure for construction work.
	17/02/2023	1	2.3 Construction planning stages-Pre-tender stage,Post-tender stage.
2ND	21/02/2023	1	2.4 Construction scheduling by Bar-charts –preparation of Bar charts for simple construction work.
	22/02/2023	1	2.5 Preparation of schedules for labour materials,machinery,finance for small works.
	23/02/2023	1	2.6 Limitation of Bar charts.

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	24/02/2023	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.
3RD	28/02/2023	1	3 MATERIALS AND STORES MANAGEMENT: 3.1 Classification of Stores-storage of stock 3.2 Issue of materials-indent, invoice, bin card.
	01/03/2023	1	MONTHLY CLASS TEST 1
	02/03/2023	1	4 CONSTRUCTION SITE MANAGEMENT: 4.1 Job Lay Out-objectives, review plans, specifications, Lay out of equipments.
	03/03/2023	1	4.2 Location of equipment, organizing labour at site. 4.3 Job Lay out for different construction sites.
4TH	09/03/2023	1	4.4 Principle of Storing material at site.
	10/03/2023	1	5 CONSTRUCTION ORGANIZATION: 5.1 Introduction-Characteristics, Structure, Importance
5TH	14/03/2023	1	5.2 Organization types-line and staff, functions and their characteristics.
	15/03/2023	1	5.3 Principles of Organization-meaning and significance of terms-control, authority, responsibility, job and task.
	16/03/2023	1	5.4 Leadership necessity, styles of leadership, role of leader

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	17/03/2023	1	5.5 Human relations-relation with subordinates, peers, supervisors, characteristics of group behavior, mob psychology, handling of grievances, absenteeism , labour welfare.
6TH	21/03/2023	1	5.6 Conflicts in organization-genesis of conflicts, types- intrapersonal,interpersonal,intergroup,resolving conflicts.
	22/03/2023	1	6 CONSTRUCTION LABOUR AND LABOUR MANAGEMENT: 6.1 Preparing labour schedule. 6.2 Essential steps for optimum labour output.
	23/03/2023	1	6.3 Labour characteristics 6.4 Wages and their payment
	24/03/2023	1	6.5 Labour incentives
7TH	28/03/2023	1	6.6 Motivation-classification of motives, different approaches to motivation.
	29/03/2023	1	7 EQUIPMENT MANAGEMENT: 7.1 Preparing the equipment schedule
	31/03/2023	1	7.2 Identification of different alternative equipment.
8TH	04/04/2023	1	7.3 Importance of Owning & Operating cost in making decisions for hiring and purchase of equipment
	05/04/2023	1	7.4 Inspection and testing of equipment 7.5 Equipment maintainance

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	06/04/2023	1	8 QUALITY CONTROL: 8.1 Concept of Quality in construction
9TH	11/04/2023	1	8.2 Quality standards-during construction,after construction,destructives & non-destructive methods
	12/04/2023	1	MONTHLY CLASS TEST 2
	13/04/2023	1	9 MONITORING PROGRESS: 9.1 Programme and progress of work. 9.2 Work study
10TH	18/04/2023	1	9.3 Analysis and control of physical and financial progress corrective measures.
	19/04/2023	1	10 SAFETY MANAGEMENT IN CONSTRUCTION: 10.1 Importance of safety
	20/04/2023	1	10.2 Causes and effects of accident in construction works.
	21/04/2023	1	10.3 safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition.
11TH	25/04/2023	1	10.4 Development of safety consciousness.
	26/04/2023	1	10.5 Safety legislation-Workman's compensation act, contract labour act
	27/04/2023	1	11 ROLE OF VULNERABILITY ATLAS OF INDIA IN CONSTRUCTION PROJECTS: 11.1 Introduction to Vulnerability Atlas of India, Concept of natural hazards and disasters and vulnerability profile of India. Definition of disaster related terms.
	28/04/2023	1	INTERNAL ASSESMENT
12TH	02/05/2023	1	11.2 Earthquake hazard and Vulnerability, Magnitude and intensity scale of

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			earthquake, seismic zones.
	03/05/2023	1	11.2 Earthquake hazard maps, types of structures and damage classification ,effects in housing and resistant measures.
	04/05/2023	1	11.3 wind/cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps.
13TH	09/05/2023	1	11.4 Flood hazard and vulnerability
	10/05/2023	1	11.4 Flood hazard and flood prone areas of the country, General protection of habitants and flood resistant construction.
	11/05/2023	1	11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability
	12/05/2023	1	11.5 Landslide and Thunderstorm incidence maps, Measure against Tsunami hazards.
14TH	16/05/2023	1	11.6 Housing vulnerability risk tables and usage of Vulnerability atlas of India,inclusion of Vulnerability atlas in Tender documents.
	17/05/2023	1	Revisions
	18/05/2023	1	Revisions
15TH	23/05/2023	1	Previous year Questions and Answer Discussion