

## LESSON PLAN FOR SUMMER 2022

DISCIPLINE:- CIVIL ENGG.	SEMESTER:-6TH SEM SEC B	NAME OF THE TEACHING FACULTY:- LAXMIPRIYA SWAIN (PTGF)
SUBJECT:- CONSTRUCTION MANAGEMENT (TH-2)	NO. OF DAYS/PER WEEK CLASS ALLOTTED:- 4T	SEMESTER - 6TH Sem SEC B FROM DATE-13/02/2023 TO DATE- 23/05/2023 NO. OF WEEKS- 15WEEKS
WEEK	CLASS DAY	THEORY TOPICS
		Chapter-1 Introduction To Construction Management(4P)
1ST WEEK	1st	1.1 Aims and objectives of construction management. 1.2 Functions of construction management.
	2nd	1.3 The construction team components- owner,engineer,architect,contractor-their functions and interrelationship and jurisdiction.
	3rd	1.4 Resources for construction management- men,machines,materials,money
		Chapter-2 Constructional Planning(7P)
2ND WEEK	1st	2.1 Importance of Construction Planning 2.2 Developing work breakdown structure for construction work
	2nd	2.3 Construction Planning stages-Pre-tender stage, Post-tender stage.
	3rd	2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.
3RD WEEK	1st	2.5 Preparation of schedules for labour materials,machinery, finance for small works 2.6 Limitation of Bar charts
	2nd	2.7 Construction scheduling by network techniques-defination 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.
		3.0 Materials and Stores Management (4P)
	3rd	3.1 Classification of Stores-storage of stock.
4TH WEEK	2nd	3.1 Classification of Stores-storage of stock.
	3rd	3.2 Issue of materials-indent , invoice, bin card
5TH WEEK	1st	3.2 Issue of materials-indent , invoice, bin card
		4.0 Construction Site Management (5P)
	2nd	4.1 Job Lay out-Objectives, Review plans, specifications Lay out of equipments.
	3rd	4.2 Location of equipment, organizing labour at site.
6TH WEEK	1st	4.3 Job lay out for different construction sites.
		4.4 Principle of storing material at site.
		5.0 Construction Organization: (6P)
	2nd	5.1 Introduction – Characteristics, Structure, importance.
	3rd	5.2 Organization types-line and staff, functions and their characteristics
	1st	5.3 Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task. Leadership-necessity, styles of leadership, role of leader
		5.4

	2nd	5.5 Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, mob psychology, handling of grievances, absenteeism, labour welfare.
8TH WEEK	1st	5.6 Conflicts in organization-genesis of conflicts, types- intrapersonal, interpersonal, intergroup, resolving conflicts. 6.0 Construction Labour and Labour Management:(6P) 6.1 Preparing Labour schedule
	2nd	6.2 Essential steps for optimum labour output
	3rd	6.3 Labour characteristics 6.4 Wages & their payment
9TH WEEK	1st	6.3 Labour characteristics 6.4 Wages & their payment
	3rd	6.5 Labour incentives
10TH WEEK	1st	6.6 Motivation- Classification of motives, different approaches to motivation. 7.0 Equipment Management (6P) 7.1 Preparing the equipment schedule
	2nd	7.2 Identification of different alternative equipment
	3rd	7.3 Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
	1st	7.4 Inspection and testing of equipment
11TH WEEK	2nd	7.5 Equipment maintenance
	3rd	8.0 Quality Control (5P) 8.1 Concept of quality in construction
	1st	8.2 Quality Standards- during construction, after construction, destructive & non destructive methods.
12TH WEEK	3rd	8.2 Quality Standards- during construction, after construction, destructive & non destructive methods.
	1st	8.2 Quality Standards- during construction, after construction, destructive & non destructive methods. 9.0 Monitoring Progress (5P) 9.1 Programme and progress of work
13TH WEEK	2nd	9.2 Work study
	3rd	9.3 Analysis and control of physical and financial progress corrective measures.
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14TH WEEK	3rd	10.1 Importance of safety
		10.2 causes and effects of accidents in construction works
EXTRA CLASSES REQUIRED		10.3 Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition.
		10.4 Development of safety consciousness
		10.5 Safety legislation- Workman's compensation act, contract labour act.
		11.0 Role of Vulnerability Atlas of India in construction projects (6P)
		11.1 Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. Definition of disaster related terms.
		11.2 Earthquake hazard and vulnerability, Magnitude and intensity scales of earthquake, seismic zones, earthquake hazard maps, types of structures and damage classification, effects in housing and

**EXTRA CLASSES  
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	11.3 Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
	11.4 Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction.
	11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
	11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.

*Laxmipriya Swain*  
SIGNATURE OF THE FACULTY