

<b>LESSON PLAN FOR SUMMER 2022</b>		
<b>DISCIPLINE:- CIVIL ENGG.</b>	<b>SEMESTER:-6TH SEM SEC A</b>	<b>NAME OF THE TEACHING FACULTY:- SAILAJA BHUYAN</b>
<b>SUBJECT:- CONSTRUCTION MANAGEMENT (TH-2)</b>	<b>NO. OF DAYS PER WEEK CLASS ALLOTTED:- 4</b>	<b>SEMESTER - 6TH SEM SEC A FROM DATE-13/02/2023 TO DATE- 23/05/2023 NO. OF WEEKS- 15WEEKS</b>
<b>WEEK</b>	<b>CLASS DAY</b>	<b>THEORY TOPICS</b>
		<b>Chapter-1 Introduction To Construction Management(4P)</b>
<b>1ST WEEK</b>	<b>1st</b>	1.1 Aims and objectives of construction management.
	<b>2nd</b>	1.2 Functions of construction management.
	<b>3rd</b>	1.3 The construction team components- owner,engineer,architect,contractor-their functions and
	<b>4th</b>	1.4 Resources for construction management- men,machines,materials,money
<b>2ND WEEK</b>		<b>Chapter-2 Constructional Planning(7P)</b>
	<b>1st</b>	2.1 Importance of Construction Planning
	<b>2nd</b>	2.2 Developing work breakdown structure for construction work
	<b>3rd</b>	2.3 Construction Planning stages-Pre-tender stage, Post-tender stage.
<b>3RD WEEK</b>	<b>4th</b>	2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.
	<b>1st</b>	2.5 Preparation of schedules for labour materials,machinery, finance for small works
	<b>2nd</b>	2.6 Limitation of Bar charts
	<b>3rd</b>	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.
		<b>3.0 Materials and Stores Management (4P)</b>
	<b>4th</b>	3.1 Classification of Stores-storage of stock.
<b>4TH WEEK</b>	<b>3rd</b>	3.1 Classification of Stores-storage of stock.
	<b>4th</b>	3.2 Issue of materials-indent , invoice, bin card
<b>5TH WEEK</b>	<b>1st</b>	3.2 Issue of materials-indent , invoice, bin card
		<b>4.0 Construction Site Management (5P)</b>
	<b>2nd</b>	4.1 Job Lay out-Objectives, Review plans, specifications Lay out of equipments.
	<b>3rd</b>	4.2 Location of equipment, organizing labour at site.
<b>6TH WEEK</b>	<b>4th</b>	4.3 Job lay out for different construction sites.
	<b>1st</b>	4.3 Job lay out for different construction sites.
	<b>2nd</b>	4.4 Principle of storing material at site.
		<b>5.0 Construction Organization: (6P)</b>
	<b>3rd</b>	5.1 Introduction – Characteristics, Structure, importance.
	<b>4th</b>	5.2 Organization types-line and staff, functions and their characteristics

7TH WEEK	1st	5.3 Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task. Leadership-necessity, styles of leadership, role of leader
	2nd	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 Leadership-necessity, styles of leadership, role of leader
	4th	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.
	<b>6.0 Construction Labour and Labour Management:(6P)</b>	
	2nd	6.1 Preparing Labour schedule
9TH WEEK	3rd	6.2 Essential steps for optimum labour output
	1st	6.3 Labour characteristics
	2nd	6.4 Wages & their payment
10TH WEEK	3rd	6.5 Labour incentives
	1st	6.6 Motivation- Classification of motives, different approaches to motivation.
	<b>7.0 Equipment Management (6P)</b>	
11TH WEEK	2nd	7.1 Preparing the equipment schedule
	3rd	7.2 Identification of different alternative equipment
	4th	7.3 Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
12TH WEEK	1st	7.3 Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
	2nd	7.4 Inspection and testing of equipment
	3rd	7.5 Equipment maintenance
13TH WEEK	<b>8.0 Quality Control (5P)</b>	
	4th	8.1 Concept of quality in construction
	1st	8.2 Quality Standards- during construction, afterconstruction, destructive & non destructive methods.
14th WEEK	2nd	8.2 Quality Standards- during construction, after construction, destructive & non destructive methods.
	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.
15th WEEK	<b>9.0 Monitoring Progress (5P)</b>	
	2nd	9.1 Programme and progress of work
	3rd	9.2 Work study
14th WEEK	4th	9.3 Analysis and control of physical and financial progress corrective measures.
	1st	9.3 Analysis and control of physical and financial progress corrective measures.
	2nd	9.3 Analysis and control of physical and financial progress corrective measures.
15th WEEK	<b>10.0 Safety Management In Construction (5P)</b>	
	3rd	10.1 Importance of safety
15th WEEK	1st	10.2 causes and effects of accidents in construction works

<b>EXTRA CLASSES REQUIRED</b>		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.
		<b>11.0 Role of Vulnerability Atlas of India in construction projects (6P)</b>
		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 resistant measures.
		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.

**SIGNATURE OF THE FACULTY**