

DEPARTMENT OF CIVIL ENGINEERING
GANAPATI INSTITUTE OF ENGINEERING AND TECHNOLOGY, JAGATPUR, CUTTACK

LESSON PLAN OF 6TH SEMESTER(2022-23) CIVIL ENGINEERING

Discipline: CIVIL ENGG.	Semester:-6 TH	Name of the Teaching Faculty BIBHU RANJAN SAMAL
Subject:- CONSTRUCTION MANAGEMENT	No of Days/per Week Class Allotted :-04	Semester From:- 13/02/2023 To:- 23/05/2023 No of Weeks:- 15
Week	Class Day	Theory/ Practical Topics
1 st	1 st	CHAPTER-1: Aims and objectives of construction management.
	2 nd	Functions of construction management.
	3 rd	The construction team components
	4 th	Resources for construction management-men, machines, materials, money
2 nd	1 st	CHAPTER-2: Constructional Planning: Importance of Construction Planning,Developing work breakdown structure for construction work
	2 nd	Construction Planning stages-Pre-tender stage, Post-tender stage.
	3 rd	Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.
	4 th	Preparation of schedules for labour materials,machinery, finance for small works, Limitation of Bar charts
3 rd	1 st	PERT and CPM
	2 nd	PERT and CPM
	3 rd	PERT and CPM
	4 th	CHAPTER-3: Materials and Stores Management:Classification of Stores-storage of stock.
4 th	1 st	Issue of materials-indent , invoice, bin card
	2 nd	Issue of materials-indent , invoice, bin card
	3 rd	Issue of materials-indent , invoice, bin card
	4 th	CHAPTER-4: Construction Site Management: Job Lay out-Objectives, Review plans, specifications
5 th	1 st	Lay out of equipments
	2 nd	Location of equipment, organizing labour at site
	3 rd	Job lay out for different construction sites.
	4 th	Principle of storing material at site.
6 th	1 st	CHAPTER-5: Construction Organization: Introduction – Characteristics, Structure, importance.
	2 nd	Organization types-line and staff, functions and their characteristics
	3 rd	Principles of organization
	4 th	Leadership-necessity, styles of leadership, role of leader
7 th	1 st	Human relations 1 CHAPTER-7: Equipment Management : Preparing the equipment schedule,
	2 nd	Conflicts in organization
	3 rd	CHAPTER-6: Construction Labour and Labour Management: Preparing Labour schedule,Essential steps for optimum labour output
	4 th	Labour characteristics
8 th	1 st	Wages & their payment
	2 nd	Labour incentives
	3 rd	Motivation- Classification of motives, different approaches to motivation.
	4 th	Motivation- Classification of motives, different approaches to motivation.

9 th	1 st	CHAPTER-7: Equipment Management : Preparing the equipment schedule, Identification of different alternative equipment
	2 nd	Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
	3 rd	Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
	4 th	Inspection and testing of equipment
10 th	1 st	Inspection and testing of equipment
	2 nd	Equipment maintenance
	3 rd	CHAPTER-8: Quality Control:Concept of quality in construction
	4 th	Quality Standards
11 th	1 st	Quality Standards
	2 nd	Quality Standards
	3 rd	Destructive & non destructive methods
	4 th	CHAPTER-9: Monitoring Progress :Programme and progress of work
12 th	1 st	Work study
	2 nd	Analysis and control of physical and financial progress corrective measures
	3 rd	Analysis and control of physical and financial progress corrective measures
	4 th	Analysis and control of physical and financial progress corrective
13 th	1 st	Analysis and control of physical and financial progress corrective measures
	2 nd	CHAPTER-10: Safety Management In Construction: Importance of safety , causes and effects of accidents in construction works
	3 rd	Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition.
	4 th	Development of safety consciousness
14 th	1 st	Safety legislation- Workman's compensation act, contract labour act
	2 nd	Safety legislation- Workman's compensation act, contract labour act
	3 rd	CHAPTER-11: Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. Definition of disaster related
	4 th	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.
15 th	1 st	Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
	2 nd	Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction.
	3 rd	Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami
	4 th	Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.