



NILASAILA INSTITUTE OF SCIENCE & TECHNOLOGY
SERGARH-756060, BALASORE (ODISHA)
(Approved by AICTE& affiliated to SCTE&VT, Odisha)



LESSON PLAN

SUBJECT: Th-2 (CONSTRUCTION MANAGEMENT)

CHAPTER WISE DISTRIBUTION OF PERIODS

Sl.No.	Name of the chapter as per the Syllabus	No. of Periods	No. of periods
1	Introduction To Construction Management	4	4
2	Constructional Planning	7	7
3	Materials and Stores Management	4	4
4	Construction Site Management	5	5
5	Construction Organisation	6	6
6	Construction Labour and Labour Management	6	6
7	Equipment Management	6	6
8	Quality Control	5	5
9	Monitoring Progress	6	6
10	Safety Management In Construction	5	5
11	Role of Vulnerability Atlas of India in construction projects	6	6
	TOTAL	60	60
Discipline: CIVIL ENGG.	Semester: 4TH	Name of the Teaching Faculty: ER. DIPTIMAYEE MOHANTY	
Week	Class Day	Theory / Practical Topics	
1st	1st	Introduction To Construction Management 1.1 Aims and objectives of construction management	
	2nd	1.1 Aims and objectives of construction management	

	3 rd	1.2 Functions of construction management.
	4 th	1.3 The construction team components-owner,engineer,architect,contractor-their functions and interrelationship and jurisdiction
2 nd	1 st	1.3 The construction team components-owner,engineer,architect,contractor-their functions and interrelationship and jurisdiction
	2 nd	1.4 Resources for construction management-men,machines,materials,money
	3 rd	Constructional Planning 2.1 Importance of Construction Planning
	4 th	2.1 Importance of Construction Planning
3 rd	1 st	2.2 Developing work breakdown structure for construction work
	2 nd	2.3 Construction Planning stages-Pre-tender stage, Post-tender stage
	3 rd	2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works
	4 th	2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works
4 th	1 st	2.5 Preparation of schedules for labour materials,machinery, finance for small works
	2 nd	2.6 Limitation of Bar charts
	3 rd	2.6 Limitation of Bar charts
	4 th	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.
	1 st	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.

5 th	2 nd	Materials and Stores Management 3.1 Classification of Stores-storage of stock
	3 rd	3.1 Classification of Stores-storage of stock
	4 th	3.2 Issue of materials-indent , invoice, bin card
6 th	1 st	Construction Site Management 4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipments.
	2 nd	4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipments
	3 rd	4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipments
	4 th	4.2 Location of equipment, organizing labour at site.
7 th	1 st	4.2 Location of equipment, organizing labour at site.
	2 nd	4.3 Job lay out for different construction sites.
	3 rd	4.4 Principle of storing material at site.
	4 th	Construction Organization: 5.1 Introduction – Characteristics, Structure, importance
8 th	1 st	5.1 Introduction – Characteristics, Structure, importance
	2 nd	5.2 Organization types-line and staff, functions and their characteristics
	3 rd	5.2 Organization types-line and staff, functions and their characteristics
	4 th	5.3 Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task.
9 th	1 st	5.4 Leadership-necessity, styles of leadership, role of leader
	2 nd	5.5 Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, mob psychology, handling of grievances, absenteeism, labour welfare

9th	3rd	5.6 Conflicts in organization-genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts.
	4th	Construction Labour and Labour Management: 6.1 Preparing Labour schedule
10th	1st	6.2 Essential steps for optimum labour output
	2nd	6.3 Labour characteristics 6.4 Wages & their payment
	3rd	6.5 Labour incentives
	4th	6.6 Motivation- Classification of motives, different approaches to motivation.
11th	1st	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 7.4 Inspection and testing of equipment
	4th	7.5 Equipment maintenance
	5th	Quality Control 8.1 Concept of quality in construction 8.2 Quality Standards- during construction, after construction, destructive & non destructive methods.
12th	1st	Monitoring Progress 9.1 Programme and progress of work 9.2 Work study
	2nd	9.3 Analysis and control of physical and financial progress corrective measures
	3rd	Safety Management In Construction 10.1 Importance of safety 10.2 causes and effects of accidents in construction works
	4th	10.3 Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition
	1st	10.4 Development of safety consciousness 10.5 Safety legislation- Workman's compensation act, contract labour act.

13th	2nd	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. Definition of disaster related terms.
	3rd	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.
	4th	11.3 Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
14th	1st	11.3 Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
	2nd	11.4 Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction
	3rd	11.4 Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction
15th	4th	11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
	1st	11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
	2nd	11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.
	3rd	11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.
	4th	11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.