Discipline: **Civil Engg.**	Semester : **6TH**	Name of the Teaching Faculty: **SHARMISTHA DAS** **(Guest Lecturer)**
Subject: CM	No. of days/per week class allotted: **04**	Semester From date : 16/01/2024 To Date: 26/04/2024 No. of Weeks: 15
Week	**Class Day**	**Theory**
1ST	1st	**Introduction To Construction Management:** Aims and objectives of construction management. 1.2 Functions of construction management.
	2nd	The construction team component owner, engineer, architect, contractor-their functions and interrelationship and jurisdiction
	3rd	Resources for construction management-men, machines, materials, money.
	4th	**Constructional Planning:** Importance of Construction Planning, Developing work breakdown structure for construction work
2ND	1st	Construction Planning stages-Pre-tender stage, Post-tender stage.
	2nd	Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works, Limitation of Bar charts
	3rd	Preparation of schedules for labour materials, machinery, finance for small works
	4th	Construction scheduling by network techniques-defination of terms ,PERT and CPM techniques, advantages and disadvantages of two techniques, network analysis
3RD	1st	estimation of time and critical path, application of PERT and CPM techniques in sample construction works
	2nd	**Materials and Stores Management:** Classification of Stores-storage of stock
	3rd	Issue of materials-indent , invoice, bin card
	4th	**Construction Site Management:** Job Lay out-Objectives, Review plans, specifications, Lay out of equipments
4TH	1st	Location of equipment, organizing labour at site
	2nd	Job lay out for different construction sites
	3rd	Principle of storing material at site
	4th	**Construction Organization:** Introduction – Characteristics, Structure, importance
5TH	1st	Organization types-line and staff, functions and their characteristics
	2nd	Principles of organization- meaning and significance of terms-control, authority, responsibility, job & task
	3rd	Leadership-necessity, styles of leadership, role of leader
	4th	Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, mob

		psychology, handling of grievances, absenteeism, labour welfare
6TH	1st	Conflicts in organization-genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts
	2nd	Class Test 1
	3rd	**Construction Labour and Labour Management:** Preparing Labour schedule, Essential steps for optimum labour output
	4th	Labour characteristics, Wages & their payment, Labour incentives
7TH	1st	Motivation- Classification of motives, different approaches to motivation
	2nd	Equipment Management Preparing the equipment schedule
	3rd	Identification of different alternative equipment
	4th	Importance of Owning & operating costs in making decisions for hiring & purchase of equipment
8TH	1st	Inspection and testing of equipment
	2nd	**Equipment maintenance**
	3rd	Class test question discussion & distribution of evaluated answer sheet to the student for the student for their references
	4th	**Quality Control:** Concept of quality in construction
9TH	1st	Quality Standards- during construction
	2nd	Quality Standards-after construction
	3rd	Quality Standards- destructive methods
	4th	Quality Standards- nondestructive methods
10TH	1st	**Monitoring Progress:** Programme and progress of work
	2nd	Methods of recording progress of work
	3rd	Analysis of progress
	4th	Productivity analysis & work study
11TH	1st	Time study of work measurements
	2nd	**Safety Management In Construction:** Importance of safety ,causes and effects of accidents in construction works
	3rd	Safety measures in worksites for excavation, scaffolding
	4th	Safety measures in worksites for formwork, fabrication

12TH	1st	Safety measures in worksites for erection, demolition
	2nd	Development of safety consciousness
	3rd	Safety legislation- Workman's compensation act
	4th	Safety legislation-contract labour act
13TH	1st	**Role of Vulnerability Atlas of India in construction projects :** Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India. Definition of disaster related terms
	2nd	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.
	3rd	Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measure
	4th	Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction
14TH	1st	Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
	2nd	Housing vulnerability risk tables and usage of vulnerability atlas of India
	3rd	Inclusion of vulnerability atlas in Tender documents.
	4th	Discussion of Assignment Questions
15TH	1st	Previous semester Question Discussion
	2nd	Previous semester Question Discussion
	3rd	OMR Test
	4th	Class Test Question Discussion & Distribution of Evaluated Answer Sheet to the student for their references