

GOVERNMENT POLYTECHNIC, SAMBALPUR (RENGALI)

DEPARTMENT OF CIVIL ENGINEERING DEPARTMENT OF CIVIL ENGINEERING

CUTTING NAME OF THE FACULTY: Shri RAMESH NAVAK (PTGF) & Miss. Pinky Sahu (PTGF), Civil Engineering

CONSTRUCTION MANAGEMENT LESSON PLAN OF CONSTRUCTION MANAGEMENT (TH-2) FOR 6TH SEM SUMMER-2023 w.e.f. 14.02.2023

DATE	WEEK NO.	TOPIC TO BE COVERED	TOPIC TO BE COVERED	TOPIC	PERIODS PER TOPIC	PERIODS AVAILABLE PER WEEK	PERIODS ASSIGNED PER TOPIC	PERIODS AVAILABLE PER WEEK
					PERIODS PER TOPIC	PERIODS AVAILABLE PER WEEK	PERIODS ASSIGNED PER TOPIC	PERIODS AVAILABLE PER WEEK
14.02.23	W-4	1.1 Introduction To Construction Management 1.1 Aims and objectives of construction management 1.2 Functions of construction management 1.3 The construction team components-owner, engineer, architect, contractor-their functions and interrelationship and jurisdiction 1.4 Resources for construction management,men,machines,materials,money	1.1 Introduction To Construction Management 1.1 Aims and objectives of construction management 1.2 Functions of construction management 1.3 The construction team components-owner, engineer, architect, contractor-their functions and interrelationship and jurisdiction 1.4 Resources for construction management,men,machines,materials,money		4	4		
20.02.23	W-4	2.1 Importance of Construction Planning 2.1 Work breakdown structure for construction work 2.3 Construction Planning stages-Pre-tender stage, Post-tender stage. 2.4 Construction	2.1 Importance of Construction Planning 2.1 Work breakdown structure for construction work 2.3 Construction Planning stages-Pre-tender stage, Post-tender stage. 2.4 Construction		3	4		
25.02.23	W-4	2.5 Preparation of schedules for labour, materials, machinery, finance for small works 2.6 Bar charts 2.7 Construction scheduling by network techniques-definition of terms,PERT and CPM techniques, advantages and disadvantages of two techniques, network analysis, resimulation off time and critical path, application of PERT and CPM techniques in sample construction works.	2.5 Preparation of schedules for labour, materials, machinery, finance for small works 2.6 Bar charts 2.7 Construction scheduling by network techniques-definition of terms,PERT and CPM techniques, advantages and disadvantages of two techniques, network analysis, resimulation off time and critical path, application of PERT and CPM techniques in sample construction works.		4	4		
04.03.23	W-4	3. Materials and Stores Management 3.1 Classification of Stores-storage of stock. 3.2 Issue of materials-indent , invoice, bin card	3. Materials and Stores Management 3.1 Classification of Stores-storage of stock. 3.2 Issue of materials-indent , invoice, bin card		4	4		
11.03.23	W-4							

# UNIT OF MANAGEMENT

(REvised)

Unit	Objectives	Topics	Period	Hours	Assessment
4. Management of Organization	4.1 Job Lay out-Objectives, Review plans, specifications, Layout of equipments; 4.2 Location of equipment, organizing labour at different construction sites; 4.3 Job lay out for different construction sites	4. Construction Site Management: 4.1 Job Lay out-Objectives, Review plans, specifications, Layout of equipments; 4.2 Location of equipment, organizing labour at different construction sites; 4.3 Job lay out for different construction sites	20.03.23 to 23.03.23	4	4
5. Human Relations	5.1 5. Construction Organization: 5.1 Introduction – Characteristics, Structure, types-importance. 5.2 Organization-types-line and staff, functions and their characteristics 5.3 Principles of organization-meaning and significance of terms-control, authority, responsibility, job & task; 5.4 Leadership-necessity, styles of leadership, role of leaders	5. Construction Organization: 5.1 Introduction – Characteristics, Structure, types-importance. 5.2 Organization-types-line and staff, functions and their characteristics 5.3 Principles of organization-meaning and significance of terms-control, authority, responsibility, job & task; 5.4 Leadership-necessity, styles of leadership, role of leaders	27.03.23 to 01.04.23	4	4
6. Construction Labour and Labour Management	6.1 Human relations with subordinates, peers, Supervisors, characteristics of group behavior; mob-psychology, handling of grievances, absenteeism, labour welfare. 6.2 Motivation- genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts	6.1 Human relations with subordinates, peers, Supervisors, characteristics of group behavior; mob-psychology, handling of grievances, absenteeism, labour welfare. 6.2 Motivation- genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts	01.04.23 to 05.04.23	4	4
7. Equipment Management	7.1 Preparing the equipment schedule 7.2 Identification of different alternative equipment 7.3 Importance of Owning & operating costs in making decisions	7.1 Preparing the equipment schedule 7.2 Identification of different alternative equipment 7.3 Importance of Owning & operating costs in making decisions	10.04.2023 to 15.04.2023	4	4
8. Quality Control	8.1 Concept of quality in construction 8.2 Quality Standards- during construction, after construction, destructive & non destructive methods.	8.1 Concept of quality in construction 8.2 Quality Standards- during construction, after construction, destructive & non destructive methods.	17.04.2023 to 22.04.2023	4	4
9. Risk Management	9.1 Risk identification 9.2 Risk assessment 9.3 Risk control	9.1 Risk identification 9.2 Risk assessment 9.3 Risk control	24.04.2023 to 29.04.2023	3	4

Project No. W-12 of 2023 Physical and Technical	9.1 Monitoring Progress 9.1 Programme and progress of work 9.2 Work study 9.3 Analysis and control of physical and financial progress corrective measures	3	4	3.53 18 G
Segment No. W-13 of 2023 Technical and Workman's Compensation Act	<b>10. Safety Management In Construction</b> 10.1 Importance of safety 10.2 causes and effects of accidents in construction works 10.3 Safety measures in worksites for excavation, 10.4 Development of safety consciousness 10.5 Safety legislation, Workman's compensation act, contract labour acts scaffolding, towerability atlas of India, 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. 11.2 Earthquake hazard and vulnerability, Magnitude and intensity scales of earthquake, seismic zones, earthquake hazard maps, types of structure	4	4	3.53 18 G
Project No. W-15 of 2023 Technical and Workman's Compensation Act	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	4	4	3.53 18 G
Project No. W-16 of 2023 Technical and Workman's Compensation Act	11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards. 11.6 Housing standards and usage of vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of atlas in Tender documents	4	4	3.53 18 G

Signature of Concerned Faculty / Head of Department

13/02/23

C/S Signature of Senior Lect./ HOD (F/c)

Department of Civil Engineering

Civil Engg. Dept.

GSSSR (Rengali)

of Concerned Faculty

of Civil Engineering

13/02/23