

**LESSON PLAN**

Discipline: Civil Engg. ,UGMIT Rayagada  
Semester: 6<sup>TH</sup>  
Name of the Teaching Faculty:  
Subject: **CONSTRUCTION MANAGEMENT (CET-601)**  
  
No of Days/week class allotted: 05  
Session: 2019-20

Week	Class Day	Theory/Practical Topics	Remarks
1	1-5	<b>1.0 Introduction To Construction Management</b> 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 <b>2.0 Constructional Planning</b> 2.1 Importance of Construction Planning 2.2 Developing work breakdown structure for construction work 2.3 Construction Planning stages-Pre-tender stage, Post-tender stage. 2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works. 2.5 Preparation of schedules for labour materials,machinery, finance for small works 2.6 Limitation of Bar charts	
2	6-10	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</b> 3.1 Classification of Stores-storage of stock. 3.2 Issue of materials-indent , invoice, bin card	
3	11-15	3.3. Stores Accounting Procedure 3.4 Inspection of stores, T&P account's register, procedure of write off <b>4.0 Construction Site Management</b> 4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipments.	

4	16-20	4.2 Factors influencing selection, design and layout of temporary facilities and services at construction site. 4.3 Principles of storing material at site.	
5	21-25	4.3 Principles of storing material at site. 4.4 Location of equipment, organizing labour at site.	
6	26-30	4.5 Job lay out for different construction sites. <b>5.0 Construction Organisation:</b> 5.1 Introduction – Characteristics, Structure, 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.	
7	31-35	5.4 Leadership-necessity, styles of leadership, role of leader 5.5 Principles of effective supervision 5.6 Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, mob psychology, handling of grievances, absenteeism, labour welfare. 5.7 Conflicts in organization-genesis of conflicts, types- intrapersonal, interpersonal, intergroup, resolving conflicts. <b>6.0 Construction Labour and Labour Management:</b> 6.1 Preparing Labour schedule	
8	36-40	6.2 Essential steps for optimum labour output 6.3 Labour characteristics 6.4 Wages & their payment 6.5 Labour incentives 6.6 Motivation- Classification of motives, different approaches to motivation.	
9	41-45	6.7 Morale 6.8 Relevant labour laws and case studies related to labour disputes <b>7 Equipment Management</b> 7.1 Preparing the equipment schedule 7.2 Identification of different alternative equipment	
10	46-50	7.3 Importance of Owning & operating costs in making decisions for hiring & purchase of equipment 7.4 Inspection and testing of equipment 7.5 Equipment maintenance and minor repairs	
11	51-55	<b>8.0 Quality Control</b> 8.1 Concept of quality in construction	
12	56-60	8.2 Quality Standards- during construction, after construction,	
13	61-65	8.2 destructive & non destructive methods. <b>9.0 Monitoring Progress</b> 9.1 Programme and progress of work	

4	66-70	9.2 Work study 9.3 Analysis and control of physical and financial progress corrective measures. <b>10.0 Safety Management In Construction</b> 10.1 Importance of safety	
15	71-75	10.2 causes and effects of accidents in construction works 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.	

Signature of Faculty:

Signature of HOD: