

BALASORE INSTITUTE OF TECHNOLOGY

Lesson Plan

Name of the Program	Diploma in Civil Engineering			
Course Name	CONSTRUCTION MANAGEMENT		Course Code	Th.1
Course Year	2nd	Semester	6th	Academic Period 2026
No. of Classes allotted per Week	04	Planned Classes Required to Complete the Course		60

Sl. No.	Topics to be covered	Module	No. of hours Required	Remark
1	Aims and objectives of construction management	I	01	
2	Functions of construction management	I	01	
3	The construction team components-owner, engineer, architect, contractor-their functions and interrelationship and jurisdiction.	I	01	
4	Resources for construction management-men,machines,materials,money	I	01	
5	Constructional Planning Importance of Construction Planning.	I	01	
6	Developing work breakdown structure for construction work.	I	01	
7	Construction Planning stages-Pre-tender stage, Post-tender stage.	II	01	
8	Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.	II	01	
9	Preparation of schedules for labour materials,machinery, finance for small works.	II	01	
10	Limitation of Bar charts	II	01	
11	Construction scheduling by network techniques-definition of terms ,PERT and CPM techniques,	II	01	
12	advantages and disadvantages of two techniques, network analysis,	II	01	
13	application of PERT and CPM techniques in sample construction works.	II	01	
14	Materials and Stores Management Classification of Stores-storage of stock	II	01	
15	Issue of materials-indent , invoice, bin card,	II	01	
16	Stores Accounting Procedure	II	01	
17	Inspection of stores, T&P account's register, procedure of write off	II	01	
18	Construction Site Management Job Lay out-Objectives, Review plans, specifications, Lay out of equipments	II	01	

19	Factors influencing selection, design and layout of temporary facilities and services at construction site	II	01	
20	Principles of storing material at site.	II	01	
21	Job lay out for different construction sites.	II	01	
22	Construction Organisation: Introduction – Characteristics, Structure, importance	II	01	
23	Organization types-line and staff, functions and their characteristics	II	01	
24	Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task.	II	01	
25	Leadership-necessity, styles of leadership, role of leader.	II	01	
26	Principles of effective supervision	III	01	
27	Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, mob psychology, handling of grievances, absenteeism, labour welfare	III	01	
28	Conflicts in organization-genesis of conflicts, types- intrapersonal, interpersonal, intergroup, resolving conflicts	III	01	
29	Construction Labour and Labour Management: Preparing Labour schedul.	III	01	
30	Essential steps for optimum labour output.	IV	01	
31	Labour characteristics.	IV	01	
32	Labour incentives	IV	01	
33	Motivation- Classification of motives, different approaches to motivation	IV	01	
34	Morale	IV	01	
35	Relevant labour laws and case studies related to labour disputes	IV	01	
36	Equipment Management Preparing the equipment schedule	IV	01	
37	Identification of different alternative equipment	V	01	
38	Importance of Owning & operating costs in making decisions for hiring & purchase of equipment.	V	01	
39	Inspection and testing of equipment	V	01	
40	Equipment maintenance and minor repairs	V	01	
41	Quality Control Concept of quality in construction.	V	01	
42	Quality Standards- during construction, after construction, destructive & non destructive methods..	V	01	

43	Monitoring Progress Programme and progress of work.	VI	01	
44	Analysis and control of physical and financial progress corrective measures.	VI	01	
45	Safety Management In Construction Importance of safety	VI	01	
46	causes and effects of accidents in construction works	VI	01	
47	Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition	VI	01	
48	Development of safety consciousness,	VII	01	
49	Safety legislation- Workman's compensation act, contract labour act.	VII	01	
50	Work study	VII	01	
51	Revision		01	
52	Revision		01	
53	Revision		01	
54	Doubt clearing		01	
55	Question ans. discussion			

Signature of the Faculty

Signature of the HoD