LESSON PLAN FOR SUMMER SESSION (2022-23)

PROGRAMME : CIVIL ENGINEERING	**NAME OF THE FACULTY: MR. ARABINDA SAHU**
COURSE NAME : CONSTRUCTION MANAGEMENT	**SESSION : 2022-23**
COURSE CODE : TH.2	**DATE : 14/02/23 To 23/05/23**
SEMESTER : 6TH	**Total Week-14**
PERIODS/WEEK: 4	
TOTAL PERIODS:56	

WEEK	PERIODS	UNITS	TOPICS
Feb. 3rd Week	1	1	**1 Introduction To Construction Management** 1.1 Aims and objectives of construction management.
	2	1	1.2 Functions of construction management,
	3	1	1.3 The construction team components owner, engineer ,architect, contractor-their functions and interrelationship and jurisdiction.
	4	1	1.4 Resources for construction management-meh, machines materials ,money
Feb. 4th Week	5	2	**2 Constructional Planning**
	6	2	2.1 Importance of Construction Planning
	7	2	2.2 Developing work breakdown structure for construction work
	8	2	2.3 Construction Planning stages-Pre-tender stage, Post-tender stage.
Mar. 1st Week	9	2	2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.
	10	2	2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.
	11	2	2.5 Preparation of schedules for labour materials ,machinery, finance for small works
	12	2	2.5 Preparation of schedules for labour materials ,machinery, finance for small works
Mar. 2nd Week	13	2	2.6 Limitation of Bar charts
	14	2	2.7 Construction scheduling by network techniques-defination of terms ,PERT techniques
	15	2	2.7 Construction scheduling by network techniques-defination of terms CPM techniques
	16	2	2.7 Construction scheduling by network techniques-defination of terms CPM techniques
Mar. 3rd Week	17		**Monthly Test-1**
	18	2	Advantages and disadvantages of two techniques, network analysis, estimation of time and critical path
	19	2	Advantages and disadvantages of two techniques, network analysis, estimation of time and critical path
	20	2	Application of PERT and CPM techniques in sample construction works
Mar. 4th Week	21	2	Application of PERT and CPM techniques in sample construction works
	22	2	Application of PERT and CPM techniques in sample construction works
	23	3	**3 Materials and Stores Management** 3.1 Classification of Stores-storage of stock. 3.2 Issue of materials-indent , invoice, bin card
	24	4	**4 Construction Site Management** 4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipments. 4.2 Location of equipment, organizing labour at site.
Apr. 1st Week	25	4	4.3 Job lay out for different construction sites. 4.4 Principle of storing material at site.
	26	5	**5 Construction Organization:** 5.1 Introduction – Characteristics, Structure, importance. 5.2 Organization types-line and staff, functions and their characteristics
	27	5	5.3 Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task 5.4 Leadership-necessity, styles of leadership, role of leader
	28	5	5.5 Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior, Mob psychology, handling of grievances, absenteeism, labour welfare
Apr. 2nd Week	29	5	5.6 Conflicts in organization-genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts
	30	6	**6 Construction Labour and Labour Management:** 6.1 Preparing Labour schedule 6.2 Essential steps for optimum labour output
	31	6	6.3 Labour characteristics 6.4 Wages & their payment
	32	6	6.5 Labour incentives 6.6 Motivation- Classification of motives, different approaches to motivation.
Apr. 3rd Week	33		**Monthly Test-2**
	34	7	**7 Equipment Management** 7.1 Preparing the equipment schedule 7.2 Identification of different alternative equipment
	35	7	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

	36	8	**8 Quality Control** 8.1 Concept of quality in construction
Apr. 4th Week	37		**Internal Assessment Exam**
	38	8	8.2 Quality Standards- during construction, after construction, destructive & non destructive methods
	39	9	9.1 Programme and progress of work
	40	9	9.2 Work study
Apr. 5th Week	41	9	9.2 Work study
	42	9	9.3 Analysis and control of physical and financial progress corrective measures
	43	10	**10 Safety Management In Construction** 10.1 Importance of safety
	44	10	10.2 causes and effects of accidents in construction works
May. 1st Week	45	10	10.3 Safety measures in worksites for excavation, scaffolding, formwork, fabrication and erection, demolition
	46	10	10.4 Development of safety consciousness
	47	10	10.5 Safety legislation- Workman's compensation act, contract labour act
	48	11	**11 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
May. 2nd Week	49	11	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.
	50	11	11.3 Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps, storm surveys and cyclone resistant measures.
	51	11	11.4 Flood hazard and vulnerability, Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction
	52	11	11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability, Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards.
May. 3rd Week	53	11	11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents.
	54		**Monthly Test-3**
	55		**Doubt Clearing Class & Previous year question Paper discussion.**
	56		**Doubt Clearing Class & Previous year question Paper discussion.**

Arabinda Sahu
Concern faculty

13.2.23
HOD
Civil engineering

24/2/23
Academic Coordinator
GP Nabarangpur

28/2/23
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