BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK

DEPARTMENT OF CIVIL ENGINEERING



LESSON PLAN

|  |  |
| --- | --- |
| SUBJECT: CONSTRUCTION MANAGEMENT (TH 2) | ACCADEMIC SESSION: 2021-22 |
| FACULTY: MISS IPSITA THAKUR | SEMESTER: 6TH  |
|  | SEC: A |

|  |
| --- |
| Sd/- |
| H O D (Civil Engg.) |

|  |  |  |
| --- | --- | --- |
| **Discipline:** **Civil Engineering** | **Semester: 6th****Sec: A** | **Name of Teaching Faculty:****MISS IPSITA THAKUR** |
| **Subject:** **CONSTRUCTION MANAGEMENT** | **No. of Days / week class allotted: 04 period per week ( TUES—1 Period, WEDS---1period FRI---1 Period, SAT -- 1 Period )** | **Semester From Date : 10-03-2022 To Date 10-06-2022****No. of Weeks: 14** |
| **Week** | **Date** | **No. of periods available** | **Topics to be covered** |
| 1st | 11/03/2022 | 1 | **1 Introduction To Construction Management:**1.1 Aims and objectives of construction management.1.2 Functions of construction management. |
| 12/03/2022 | 1 | 1.3 The construction team componentsowner,engineer,architect,contractor-their functions and interrelationship and jurisdiction.1.4 Resources for construction management-men,machines,materials,money |
| 2nd | 15/03/2022 | 1 | **2 Constructional Planning**2.1 Importance of Construction Planning2.2 Developing work breakdown structure for construction work2.3 Construction Planning stages-Pre-tender stage, Post-tender stage |
| 16/03/2022 | 1 | 2.4 Construction scheduling by Bar charts-preparation of Bar Charts for simple construction works.2.5 Preparation of schedules for labour materials |
| 3rd | 22/03/2022 | 1 | 2.5 machinery, finance for small works.2.6 Limitation of Bar charts**.** |
| 23/03/2022 | 1 | 2.7 Construction scheduling by network techniques-defination of terms ,PERTand CPM techniques, advantages and disadvantages of two techniques, networkanalysis, estimation of time and critical path, application of PERT and CPMtechniques in sample construction works. |
|  | 25/03/2022 | 1 | **3 Materials and Stores Management**3.1 Classification of Stores-storage of stock.3.2 Issue of materials-indent , invoice, bin card. |
| 26/03/2022 | 1 | **4 Construction Site Management**4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of equipments |
| 4th | 29/03/2022 | 1 | 4.2 Location of equipment, organizing labour at site. |
| 30/03/2022 | 1 | 4.3 Job lay out for different construction sites. |
| 02/04/2022 | 1 | 4.4 Principle of storing material at site.**5 Construction Organization:** 5.1 Introduction – Characteristics, Structure, importance. |
| 5th | 05/04/2022 | 1 | Monthly Class Test 1 |
| 06/04/2022 | 1 | 5.2 Organization types-line and staff, functions and their characteristics |
| 08/04/2022 | 1 | 5.3 Principles of organization- meaning and significance of terms- control, authority, responsibility, job & task. |
| 09/04/2022 | 1 | 5.4 Leadership-necessity, styles of leadership, role of leader |
| 6th | 12/04/2022 |  | 5.5 Human relations-relations with subordinates, peers, Supervisors, characteristics of group behavior |
| 13/04/2022 | 1 | 5.5 mob psychology, handling of grievances, absenteeism, labour welfare.5.6 Conflicts in organization-genesis of conflicts, types-intrapersonal, interpersonal, intergroup, resolving conflicts. |
| 16/04/2022 | 1 | **6 Construction Labour and Labour Management**:6.1 Preparing Labour schedule6.2 Essential steps for optimum labour output |
|  | 19/04/2022 | 1 | 6.3 Labour characteristics6.4 Wages & their payment |
| 7th | 20/04/2022 | 1 | 6.5 Labour incentives6.6 Motivation- Classification of motives, different approaches to motivation. |
| 22/04/2022 | 1 | **7 Equipment Management**7.1 Preparing the equipment schedule |
| 23/04/2022 | 1 | 7.2 Identification of different alternative equipment. |
| 8th | 26/04/2022 | 1 | 7.3 Importance of Owning & operating costs in makingdecisions for hiring & purchase of equipment |
| 27/04/2022 | 1 | **7**.4 Inspection and testing of equipment7.5 Equipment maintenance |
| 29/04/2022 | 1 | 8 Quality Control  8.1 Concept of quality in construction 8.2 Quality Standards- during construction |
| 30/04/2022 | 1 | Monthly Class Test 2 |
| 9th | 04/05/2022 | 1 | 8.2 after construction, destructive &non destructive methods |
| 06/05/2022 | 1 | **9 Monitoring Progress**9.1 Programme and progress of work9.2 Work study |
| 07/05/2022 | 1 | **10 Safety Management In Construction**10.1 Importance of safety10.2 causes and effects of accidents in construction works |
| 10th | 10/05/2022 | 1 | Internal Assessment |
| 11/05/2022 | 1 | 10.3 Safety measures in worksites for excavation, scaffolding,formwork, fabrication and erection, demolition. |
| 13/05/2022 | 1 | 10.4 Development of safety consciousness10.5 Safety legislation- Workman’s compensation act, contract labour act. |
| 14/05/2022 | 1 | 11 Role of Vulnerability Atlas of India in construction projects11.1 Introduction to Vulnerability Atlas of India, Concepts of natural hazards and disasters and vulnerability profile of India |
|  | 17/05/2022 | 1 | 11.1Definition of disaster related terms.11.2 Earthquake hazard and vulnerability, Magnitude and intensity scales of earthquake, seismic zones |
| 11th | 18/05/2022 | 1 | 11.2earthquake hazard maps, types of structures and damage classification, effects in housing and resistant measures. . |
| 20/05/2022 | 1 | 11.3 Wind / Cyclone hazard and vulnerability, wind speed and pressures, wind hazard and cyclone occurrence maps |
| 21/05/2022 | 1 | 11.3 storm surveys and cyclone resistant measures |
| 12th | 24/05/2022 | 1 | 11.4 Flood hazard and vulnerability |
| 25/05/2022 | 1 | 11.4 Flood hazard and Flood prone areas of the country, General protection of habitants and flood resistant construction. |
| 27/05/2022 | 1 | 11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability,  |
| 28/05/2022 | 1 | Monthly Class Test 3 |
| 13th | 31/05/2022 | 1 |  11.5 Landslide & Thunderstorm incidence maps, Measures against Tsunami hazards. |
| 01/06/2022 | 1 | 11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India,Inclusion of vulnerability atlas in Tender documents.  |
| 03/06/2022 | 1 | Revision  |
| 04/06/2022 | 1 | Revision |
| 14th | 07/06/2022 | 1 | Previous Year Questions and Answers discussion |
| 08/06/2022 | 1 | Previous Year Questions and Answers discussion |
| 10/06/2022 | 1 | Previous Year Questions and Answers discussion |