## BALASORE SCHOOL OF ENGINEERING, BALASORE

## **LESSON PLAN 2023/SEMESTER:-6th**

SUBJECT:Construction management(TH-02)

## NAME OF THE FACULTY:ER. S.L. ROUT

| SL<br>NO. | MONTH/NO. OF<br>ACADEMIC DAYS<br>AVAILABLE FOR<br>THE SUBJECT | DATE    | TOPICS TO BE COVERED  |         |
|-----------|---|---------|---|---------|
| 1         | FEB/05  | 23/2/23 | Introduction To Construction Management   | MC dist |
|           |   |         | Aims and objectives of construction management.   | -       |
| 2         |   | 24/2/23 | 1.2Functions of construction management   |         |
| 3         | <u> </u>  | 25/2/23 | 1.3 The construction team   |         |
|           | A I   |         | componentsowner, engineer, architect, contractor-their functions and interrelationship and jurisdiction |         |
| 4         | 1   | 27/2/23 | 1.4 Resources for construction management-  |         |
| ĺ         |   |         | men,machines,materials,money  |         |
| 5         |   | 28/2/22 | Constructional Planning   |         |
|           |   |         | 2.1 Importance of Construction Planning   |         |
| 6         |   | 1/3/23  | 2.2 Developing work breakdown structure for construction work 2.3                                       |         |
|           | MARCH/22  |         | Construction Planning stages-Pre-tender stage, Post-tender stage.                                       |         |
| 7         | 1   | 2/3/23  | 2.4 Construction scheduling by Bar charts-preparation of Bar Charts                                     |         |
|           |   |         | for simple construction works   |         |
| 8         |   | 3/3/23  | . 2.5 Preparation of schedules for labour materials, machinery,   |         |
|           |   |         | finance for small works 2.6 Limitation of Bar charts  |         |
| 9         | 7   | 4/3/23  | 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                                       | 1       |
|           |   |         | path, application of PERT and CPM techniques in sample  |         |
| -         |   |         | construction works.   |         |
| 10        |   | 6/3/23  | Materials and Stores Management   |         |
|           |   |         | 3.1 Classification of Stores-storage of stock.  |         |
|           |   |         | 3.2 Issue of materials-indent , involce, bin card   | DAN!    |
| 11        |   | 9/3/23  | Construction Site Management  |         |
|           |   |         | 4.1 Job Lay out-Objectives, Review plans, specifications, Lay out of                                    |         |
|           |   |         | equipments  | niew .  |
| 12        | 1   | 10/3/23 | 4.2 Location of equipment, organizing labour at site.   |         |
| 13        |   | 11/3/23 | 4.3 Job lay out for different construction sites.   | 1       |
|           |   |         | 4.4 Principle of storing material at site   | MODE    |
| 14        | 1   | 13/3/23 | Construction Organization   |         |
|           |   |         | 5.1 Introduction – Characteristics, Structure, importance.  | anc e   |
| 15        |   | 14/3/23 | 5.2 Organization types-line and staff, functions and their  |         |
|           |   |         | characteristics   | -       |
| 16        |   | 15/3/23 | 5.3 Principles of organization- meaning and significance of terms-                                      |         |
|           |   |         | control,authority, responsibility, job & task.  |         |

| 17 |               | 16/3/23  |  |
|----|---------------|----------|--|
| 18 | 1             | 17/3/23  | 5.4 Leadership-necessity, styles of leadership, role of leader           |
|    |               | 17/3/23  | 5.5 Human relations-relations with subordinates, peers, Supervisors,     |
|    |               |          | characteristics of group behavior, mob psychology, handling of           |
| 19 | -             | 40/2/22  | grievances, absenteeism, labour welfare.                                 |
| 19 |               | 18/3/23  | 5.6 Conflicts in organization-genesis of conflicts, types-intrapersonal, |
| 20 | -             |          | interpersonal, intergroup, resolving conflicts                           |
| 20 |               | 20/3/23  | Construction Labour and Labour Management:                               |
|    |               |          | 6.1 Preparing Labour schedule  |
| 24 | _             |          | 6.2 Essential steps for optimum labour output                            |
| 21 |               | 21/3/23  | 6.3 Labour characteristics   |
|    |               |          | 6.4 Wages & their payment  |
|    | 1             |          | 6.5 Labour incentives  |
| 22 |               | 22/3/23  | 6.6 Motivation- Classification of motives, different approaches to       |
|    |               |          | motivation   |
| 23 |               | 23/3/23  | Equipment Management   |
|    |               |          | 7.1 Preparing the equipment schedule                                     |
|    |               |          | 7.2 Identification of different alternative equipment                    |
| 24 | 9             | 24/3/23  | 7.3 Importance of Owning & operating costs in making                     |
|    |               |          | decisions for hiring & purchase of equipment                             |
| 25 | 1             | 25/3/23  | 7.4 Inspection and testing of equipment                                  |
|    |               |          | 7.5 Equipment maintenance  |
| 26 | 1             | 27/3/23  | Quality Control  |
|    |               |          | 8.1 Concept of quality in construction                                   |
| 27 |               | 28/3/23  | 8.2 Quality Standards- during construction, after                        |
|    |               | -5,5,-5  | construction   |
| 28 | -             | 29/3/23  | destructive & non destructive  |
| 20 |               | 23,3,23  | methods. Monitoring Progress   |
| 29 | APRIL/12      | 3/4/23   | Monitoring Progress  |
| 25 | 7.1.1.1.2, 12 | 3, 1, 23 | 9.1 Programme and progress of work                                       |
| 30 |               | 4/4/23   | 9.2 Work study9.3 Analysis and control of physical and financial         |
| 30 |               | 1,1,23   | progress corrective measures.  |
| 24 | _             | 5/4/23   |  |
| 31 |               |          | Safety Management In Construction  |
| 32 |               | 6/4/23   | Safety Management In Construction  |
|    |               |          | 10.1 Importance of safety  |
| 33 |               | 10/4/23  | 10.2 causes and effects of accidents in construction works.              |
| 34 |               | 11/4/23  | 10.3 Safety measures in worksites for excavation, scaffolding,           |
|    |               |          | formwork, fabrication and erection, demolition                           |
| 35 |               | 12/4/23  | 10.4 Development of safety consciousness                                 |
| 36 | 1             | 13/4/23  | 10.5 Safety legislation- Workman's compensation act, contract            |
|    |               |          | labour act   |
| 37 | 1             | 24/4/23  | Role of Vulnerability Atlas of India in construction projects            |
| 3, |               |          | 11.1 Introduction to Vulnerability Atlas of India, Concepts of natural   |
|    |               |          | hazards anddisasters and vulnerability profile of India                  |
| 38 | 1             | 25/4/23  | Definition of disaster related terms. Role of Vulnerability Atlas of     |
| 20 |               | 23/7/23  |  |
|    |               | 25/4/22  | India in construction projects   |
| 39 |               | 26/4/23  | 11.2 Earthquake hazard and vulnerability                                 |
| 40 |               | 27/4/23  | Magnitude and intensity scales OF earthquake, seismic zones,             |
|    |               |          | earthquake hazard maps   |
| 41 |               | 28/4/23  | types of structures and damage classification, effects in housing and    |
|    | 1             |          | resistant measures   |

| 42 | May/11   | 1/5/23   | 11.3 Wind / Cyclone hazard and vulnerability, wind speed and   |  |
|----|----------|--|--|--|
|    |          |  | pressures,.  |  |
| 43 |          | 2/5/23   | storm surveys and cyclone resistant measures   |  |
| 44 | 3/5/23 1 |  | 11.4 Flood hazard and vulnerability,   |  |
| 45 |          | 4/5/23   | Flood hazard and Flood prone areas of thecountry   |  |
| 46 | 1        | 5/5/23 General protection of habitants and flood resistant construction. |  |  |
| 47 |          | 6/5/23   | 11.5 Landslides, Tsunamis and Thunderstorm hazards and vulnerability,  |  |
| 48 |          | 8/5/23   | Landslide & Thunderstorm incidence maps, Measures against Tsunamihazards.  |  |
| 49 |          | 9/5/23   | 11.6 Housing vulnerability risk tables and usage of vulnerability atlas of India, Inclusion of vulnerability atlas in Tender documents |  |

## **BRIEF SUMMARY OF THE PLAN:**

| SL NO | MONTH | UNITS/CHAPTER TO BE COVERED | % OF COVERAGE |
|-------|-------|-----------------------------|---------------|
| 1     | MAR   | Ch-1, Ch-2                  | 05%           |
| 2     | APRIL | Ch-2,CH-3,CH-4,CH-5,CH-     | 55%           |
|       |       | 6,CH7,CH-8,                 |               |
| 3     | MAY   | CH-9,CH-10 , CH-11          | 35%           |
| 4     | JUNE  | CH-11                       | 05%           |

SIGNATURE OF THE FACULTY:

DATE: 23.2.23

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DATE:

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