## SYNERGY SCHOOL OF ENGINEERING, DHENKANAL

## **LESSON PLAN** Session 2024-2025

| Discipline: Civil Engineering | Semester: 6th     | Name of the Faculty: Kedarnath Behera Email; kedarnathbehera2015@gmail.com |
|-------------------------------|-------------------|--|
| Subject: Construction         | No. of Days/week: | Start Date: 4 2/25   |
| Management                    | 04                | End Date: 17 / 5 / 25  |

| Week            | Class Day | s Day   Theory Topics   |  |  |
|-----------------|-----------|---|--|--|
| 1st             | 1st       | Objectives, functions of construction management and construction team          |  |  |
|                 | 2nd       | Resources for construction management-men, machines, materials, money           |  |  |
|                 | 3rd       | Importance of construction planning, developing work breakdown structure        |  |  |
|                 | 4th       | Construction planning stages-pre-tender stage, post-tender stage                |  |  |
| 2nd             | 1st       | Doubt clearing class  |  |  |
|                 | 2nd       | Scheduling by bar charts-preparation of bar charts and limitation of bar charts |  |  |
|                 | 3rd       | Estimation of time and critical path, application of PERT and CPM               |  |  |
|                 | 4th       | Doubt clearing class  |  |  |
| 3rd             | 1st       | Organization types-line and staff, functions                                    |  |  |
|                 | 2nd       | Doubt clearing class  |  |  |
|                 | 3rd       | Line and staff characteristics  |  |  |
|                 | 4th       | Principles of organization-meaning  |  |  |
| 4th             | 1st       | Significances of terms-control, authority, responsibility, job, task            |  |  |
|                 | 2nd       | Leadership-necessity, style and role  |  |  |
|                 | 3rd       | Doubt clearing class  |  |  |
|                 | 4th       | Principle of effective supervision  |  |  |
| 5th             | 1st       | Motivation-classification 0f motives  |  |  |
|                 | 2nd       | Different approaches of motives   |  |  |
|                 | 3rd       | Human relations with subordinates, peer, characteristics of group behaviour     |  |  |
|                 | 4th       | Workshop done for students group behaviour development                          |  |  |
| - 187           | 1st       | Handling of grievances, absenteeism, labour welfare                             |  |  |
| 6 <sup>th</sup> | 2nd       | Conflicts in organization   |  |  |
|                 | 3rd       | Morale  |  |  |
|                 | 4th       | Factors influencing selection, design and layout of temporary facilities        |  |  |
| 7 <sup>th</sup> | 1st       | Doubt clearing class  |  |  |
|                 | 2nd       | Services at construction site   |  |  |
|                 | 3rd       | Doubt clearing class  |  |  |
|                 | 4th       | Principles of storing material at site .  |  |  |
| 8 <sup>th</sup> | 1st       | Location of equipment organizing labour at site                                 |  |  |
|                 | 2nd       | Concept of Quality control  |  |  |
|                 | 3rd       | Concept of quality in construction  |  |  |
|                 | 4th       | Quality standard-during construction after construction                         |  |  |
|                 | 1st       | Destructive and non destructive method  |  |  |
| 9 <sup>th</sup> | 2nd       | Preparing labour schedule, steps for optimum labour output                      |  |  |
|                 | 3rd       | Group discussion quality of construction  |  |  |
|                 | 4th       | Labour characteristics  |  |  |





| 10th 2nd 3rd 4th | 1st | Wages and their payment  |  |  |
|------------------|-----|--|--|--|
|                  | 2nd | Labour incentives  |  |  |
|                  | 3rd | Relevant labour laws and case studies  |  |  |
|                  | 4th | Group discussion among students labour laws and case studies                           |  |  |
| 11 <sup>th</sup> | lst | Doubt clearing class   |  |  |
|                  | 2nd | Programme and progress of work   |  |  |
|                  | 3rd | Work study   |  |  |
|                  | 4th | Importance of safety   |  |  |
| 12 <sup>th</sup> | lst | Group discussion about importance of safety  |  |  |
|                  | 2nd | Causes and effects of accidents in construction works                                  |  |  |
|                  | 3rd | Safety measures in worksites for excavation, scaffolding, formwork                     |  |  |
|                  | 4th | Fabrication, erection, demolition  |  |  |
| 13 <sup>th</sup> | 1st | Safety legislation-workman's compensation act, contract labour                         |  |  |
|                  | 2nd | Group discussion about safety legislation  |  |  |
|                  | 3rd | Preparing equipment schedule   |  |  |
|                  | 4th | Identification of different alternative equipment                                      |  |  |
| 14տ              | 1st | Importance of owning and operating costs in making decisions for purchase of equipment |  |  |
|                  | 2nd | Inspection and testing of equipment  |  |  |
|                  | 3rd | Group discussion equipment schedule, inspection and testing of equipment               |  |  |
|                  | 4th | Job layout for different construction sites, equipment maintenance and minor repairs   |  |  |
| 15 <sup>th</sup> | 1st | Classification of stores-storage of stock  |  |  |
|                  | 2nd | Issue of materials-indent, in voice, bincard   |  |  |
|                  | 3rd | Stores accounting process  |  |  |
|                  | 4th | Group discussion on stores accounting process  |  |  |

