

ASIAN SCHOOL OF TECHNOLOGY, BHUBANESWAR

DEPARTMENT OF CIVIL ENGINEERING

LESSON PLAN

| Discipline: Civil engineering | Semester : 3 rd | No. of periods available: 51 | Name of Teaching Faculty: Bisnupriya Jena |
|--|--|------------------------------|---|
| Subject: Construction Management | No. of Days/ per week class allotted: 4 periods per week | | No. of weeks : 13 |
| Week | Class Day | | Topics to be covered |
| 1 st | 1 st | 1 | Objectives, functions of construction management and construction team |
| | 2 nd | 1 | Resources for constructi on managem ent-men, machines, materials, money |
| | 3 rd | 1 | Importance of construction planning, developing work breakdown structure |
| | 4 th | 1 | Construction planning stages-pre-tender stage, post-tender stage |
| 2 nd | 5 th | 1 | Doubt clearing class |
| | 6 th | 1 | Scheduling by bar charts-preparation of bar charts and limitation of bar charts |
| | 7 th | 1 | Estimation of time and critical path, application of PERT and |
| | 8 th | 1 | Doubt clearing class |
| 3 rd | 9 th | 1 | Organization types- line and staff, functions |
| | 10 th | 1 | Line and staff characteristics |
| | 11 th | 1 | Principles of organization-meaning |

| | 12 th | 1 | Significances of terms-control, authority, |
|-----------------|--------------------|---|--|
| | | | responsibility, job, |
| | | | Task, Leadership- |
| | | | necessity, style and |
| | | | role |
| 4 th | 13 th | 1 | Principle of effective |
| · · | 15 | | supervision |
| | 14 th | 1 | Motivation- |
| | | | classification 0f |
| | | | motives |
| | 15 th | 1 | Different approaches |
| | | | of motives |
| | 16 th | 1 | Human relations with |
| | | | subordinates, peer, |
| | | | characteristics of |
| | | | 1 1 . |
| ~th | 1.77th | 1 | group behaviour |
| 5 th | 17^{th} | 1 | Workshop done for |
| | | | students group |
| | | | behaviour |
| | 18 th | 1 | development |
| | 18 | 1 | Handling of |
| | | | grievances, |
| | | | absenteeism, labour welfare |
| | 19 th | 1 | Conflicts in |
| | 19 | 1 | organization |
| | 20^{th} | 1 | Morale |
| 6 th | 21 st | 1 | Factors influencing |
| | 21 | | selection, design and |
| | | | layout of temporary |
| | | | facilities |
| | 22 nd | 1 | Class test-1 |
| | 23 rd | 1 | Services at |
| | | | construction site |
| | 24 th | 1 | Doubt clearing class |
| 7 th | 25 th | 1 | Principles of storing |
| | | | material at site |
| | 26 th | 1 | Location of |
| | | | equipment organizing |
| | | | labour at site |
| | 27^{th} | 1 | Concept of Quality |
| | | | control |
| | 28 th | 1 | Concept of quality in |
| | | | construction |
| 8 th | 29 th | 1 | Quality standard- |
| | | | during construction |
| | | | after construction |
| | $30^{\rm th}$ | 1 | Destructive and non |
| | | | destructive method |
| | 31 st | 1 | Preparing labour |
| | | | schedule, steps for |

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| | | | optimum labour |
| - | 32 nd | 1 | output |
| | 32 | 1 | Group discussion |
| 9 th | 33 rd | 1 | quality of construction |
| 9 | 33 34 th | 1 | Labour characteristics |
| | 34 | 1 | Wages and their |
| | 35 th | 1 | payment |
| - | 35 th | 1 | Labour incentives |
| | 36** | 1 | Relevant labour laws |
| 10 th | 37 th | 1 | and case studies |
| 10 | 37 | 1 | Group discussion |
| | | | among students labour |
| - | 38 th | 1 | laws and case studies |
| | 38 | 1 | Programme and |
| | | | progress of work |
| | | | Work study |
| | | | Importance of safety |
| | | | Causes and effects of accidents in |
| | | | construction works |
| | 39 th | 1 | Safety measures in |
| | 39 | 1 | worksites for |
| | | | excavation, |
| | | | scaffolding, |
| | | | |
| | | | formwork |
| | 40 | 1 | Quiz |
| 11 th | 41 st | 1 | Fabrication, erection, |
| | | | demolition |
| | 42 nd | 1 | Safety legislation- |
| | | | workman's |
| | | | compensation act, |
| | | | contract |
| | | | labour |
| - | 43 rd | 1 | Group discussion |
| | 43 | 1 | about safety |
| | | | legislation |
| | 44 th | 1 | Preparing equipment |
| | 77 | 1 | schedule |
| 12 th | 45 th | 1 | Identification of |
| | .5 | 1 | different alternative |
| | | | equipment |
| | 46 th | 1 | Importance of owning |
| | . • | | and operating costs in |
| | | | making decisions |
| | | | |
| | | | for purchase of |
| | 47 th | 1 | equipment Crown discussion |
| | 47 | 1 | Group discussion |
| | | | equipment schedule, |
| | | | inspection and testing |
| | | | of equipment |
| | 48 th | 1 | Job layout for |
| | | | different construction |

| | | | sites, equipment |
|------------------|------------------|---|---|
| | | | maintenance and minor repairs |
| 13 th | 49 th | 1 | Classification of stores-storage of stock |
| | 50 th | 1 | Issue of materials- indent, in voice, bincard |
| | 51 st | 1 | Stores accounting process |
| | 52 nd | 1 | Group discussion on stores accounting process |