

LESSON PLAN

DEPARTMENT OF ELECTRICAL ENGINEERING, ITT, CHOUDWAR

SUBJECT: EVS

Periods: 4 per week

SEMESTER: 3rd

NAME OF FACULTY: Manoj Kumar Behera

No. of weeks: 15

| Week | Period | Theory / Practical Topics |
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| 1 st | 1 st | Definition of environmental studies |
| | 2 nd | Scope of <i>environmental studies</i> |
| | 3 rd | Importance of <i>environmental studies</i> |
| | 4 th | Need for public awareness |
| 2 nd | 1 st | Forest resources Use and over-exploitation, deforestation, case studies |
| | 2 nd | Timber extraction mining, dams and their effects on forests and tribal people. |
| | 3 rd | Water resources: Use and over-utilization of surface and ground water |
| | 4 th | Water resources; floods, drought, conflicts over water, dam's benefits and problems. |
| 3 rd | 1 st | Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources. |
| | 2 nd | Food Resources: World food problems, changes caused by agriculture and over grazing |
| | 3 rd | Food Resources; effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity. |
| | 4 th | . Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies. |
| 4 th | 1 st | Land Resources: Land as a resource, land degradation, man induces landslides |
| | 2 nd | soil erosion, and desertification |
| | 3 rd | 2 Role of individual in conservation of natural resources. |
| | 4 th | Equitable use of resources for sustainable life styles. , |
| 5 th | 1 st | Concept of an eco system |
| | 2 nd | Structure and function of an eco system |
| | 3 rd | Producers, consumers, decomposers. |
| | 4 th | Energy flow in the eco systems.. |
| 6 th | 1 st | Energy flow in the eco systems.. |
| | 2 nd | Energy flow in the eco systems.. |
| | 3 rd | Food chains, food webs and ecological pyramids.. |
| | 4 th | Introduction, types, characteristic features, structure and function of the following eco system |
| 7 th | 1 st | Forest ecosystem |
| | 2 nd | Aquatic eco systems (ponds, streams, lakes, rivers, oceans estuaries) |
| | 3 rd | Introduction-Definition: genetics, species and ecosystem diversity.. |
| | 4 th | Biogeographically classification of India |
| 8 th | 1 st | Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values. |
| | 2 nd | . Biodiversity at global, national and local level |
| | 3 rd | Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts. |
| | 4 th | Environmental Pollution;Definition Causes, effects and control measures of., |

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| 9 th | 1 st | Air pollution |
| | 2 nd | Water pollution |
| | 3 rd | Soil pollution |
| | 4 th | Marine pollution |
| 10 th | 1 st | Noise pollution |
| | 2 nd | Thermal pollution |
| | 3 rd | Nuclear hazards |
| | 4 th | Solid waste Management: Causes, effects and control measures of urban and industrial wastes |
| 11 th | 1 st | Role of an individual in prevention of pollution |
| | 2 nd | Disaster management: Floods, earth quake, cyclone and landslides. |
| | 3 rd | Social issues and the Environment: |
| | 4 th | Form unsustainable to sustainable development |
| 12 th | 1 st | Urban problems related to energy. |
| | 2 nd | Water conservation, rain water harvesting, water shed management.. |
| | 3 rd | Resettlement and rehabilitation of people; its problems and concern |
| | 4 th | Environmental ethics: issue and possible solutions. |
| 13 th | 1 st | Climate change, global warming, acid rain |
| | 2 nd | ozone layer depletion, nuclear accidents and holocaust, case studies |
| | 3 rd | Air (prevention and control of pollution) Act. |
| | 4 th | Prepare one estimate of materials required for service connection to a factory building with load within 15 KW using insulated wire. |
| 14 th | 1 st | Water (prevention and control of pollution) Act. bare conductor and insulated wire combined. |
| | 2 nd | Public awareness. |
| | 3 rd | Human population and the environment |
| | 4 th | Population growth and variation among nations |
| 15 th | 1 st | Population explosion- family welfare program |
| | 2 nd | Environment and human health. |
| | 3 rd | Human rights |
| | 4 th | Value education |

Teaching Faculty