



NILASAILA INSTITUTE OF SCIENCE & TECHNOLOGY
SERGARH-756060, BALASORE (ODISHA)
(Approved by AICTE& affiliated to SCTE&VT, Odisha)



LESSON PLAN

SUBJECT: Th-5(ENVIRONMENTAL STUDIES)

Name Of The Faculty :- Er. Saroj kumar patra

Branch :- Automobile Engineering

Session :- 2024-25

Semester :- 3rd

Examination :- 2024 (w)

CHAPTER WISE DISTRIBUTION OF PERIODS

| Sl.No. | Name of the chapter as per the Syllabus | No. of Periods as per the Syllabus | No. of periods actually needed |
|--------|---|------------------------------------|--------------------------------|
| 1 | The Multidisciplinary nature of environmental studies | 4 | 2 |
| 2 | Natural Resources | 10 | 14 |
| 3 | Systems | 8 | 9 |
| 4 | Biodiversity and it's Conservation | 8 | 10 |
| 5 | Environmental Pollution | 12 | 13 |
| 6 | Social issues and the Environment | 10 | 12 |
| 7 | Human population and the environment | 8 | 8 |
| | Total Period: | 60 | 68 |

S. K. Patra
29/06/24
Sign of Faculty

[Signature]
29/06/24
Sign of H.O.D.



| Discipline: Automobile ENGINEERING | Semester: 3rd | Name of the Teaching Faculty: Er.Saroj kumar patra | |
|--|------------------|--|------------------------|
| | | SESSION : 2024-25 | EXAMINATION : 2024 (W) |
| Week | Class Day | Topics to be Covered | |
| 1 st | 1 st | Introduction to The Multidisciplinary nature of environmental studies | |
| | 2 nd | unit-1: The Multidisciplinary nature of environmental studies The Multidisciplinary nature of environmental studies: Definition, scope and importance. | |
| | 3 rd | Need for public awareness. | |
| | 4 th | unit-2 : Natural Resources Renewable and non renewable resources | |
| 2 nd | 1 st | Natural resources and associated problems. | |
| | 2 nd | Forest resources: Use and over-exploitation, deforestation, case studies, Use and over-exploitation. | |
| | 3 rd | Deforestation, case studies. | |
| | 4 th | Timber extraction mining, dams and their effects on forests and tribal people. | |
| 3 rd | 1 st | Mineral Resources: Use and exploitation. | |
| | 2 nd | environmental effects of extracting and using mineral resources. | |
| | 3 rd | Food Resources: World food problems . | |
| | 4 th | changes caused by agriculture and over grazing. | |
| 4 th | 1 st | Effects of modern agriculture , fertilizers pesticides problems, water logging, salinity. | |
| | 2 nd | Energy Resources: Growing energy need, renewable and nonrenewable energy sources, use of alternate energy sources, case studies. | |
| | 3 rd | Land Resources: Land as a resource ,land degradation ,man induces landslides, soil erosion, and desertification. | |
| | 4 th | Role of individual in conservation of natural resources. | |
| 5 th | 1 st | Equitable use of resources for sustainable lifestyles. | |
| | 2 nd | Unit 3: Systems Concept of an ecosystem | |
| | 3 rd | Structure and function of an ecosystem | |
| | 4 th | Producers, consumers, decomposers | |
| 6 th | 1 st | Energy flow in the ecosystems. | |
| | 2 nd | Ecological succession. | |
| | 3 rd | Food chains, food web and ecological pyramids | |
| | 4 th | Introduction, types, characteristic features, structure and function of the following ecosystem. | |
| 7 th | 1 st | Forest ecosystem. | |
| | 2 nd | Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries). | |
| Week | Class Day | Topics to be Covered | |

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| 7 th | 3 rd | Unit 4: Biodiversity and it's Conservation Introduction-Definition: genetics, species and ecosystem diversity. |
| | 4 th | Biogeographically classification of India. |
| 8 th | 1 st | Value of biodiversity: consumptive use |
| | 2 nd | Value of biodiversity: productive use |
| | 3 rd | social ethical, aesthetic and opt in values. |
| | 4 th | Biodiversity at global. |
| 9 th | 1 st | national and local level. |
| | 2 nd | Threats to biodiversity: Habitats loss |
| | 3 rd | Threats to biodiversity: poaching of wild life |
| | 4 th | Threats to biodiversity:man wildlife conflicts. |
| 10 th | 1 st | Unit 5: Environmental Pollution Definition Causes, effects and control measures of: Air pollution. |
| | 2 nd | Water pollution. |
| | 3 rd | Soil pollution |
| | 4 th | Marine pollution |
| 11 th | 1 st | Noise pollution |
| | 2 nd | Thermal pollution |
| | 3 rd | Nuclear hazards. |
| | 4 th | Solid waste Management: Causes, effects |
| 12 th | 1 st | Control measures of urban and industrial wastes. |
| | 2 nd | Role of an individual in prevention of pollution. |
| | 3 rd | INTERNAL ASSESMENT |
| | 4 th | INTERNAL ASSESMENT |
| 13 th | 1 st | Disaster management: Floods |
| | 2 nd | Disaster management:earth quake |
| | 3 rd | Disaster management: cyclone and landslides |
| | 4 th | Unit 6: Social issues and the Environment From unsustainable to sustainable development. |
| 14 th | 1 st | Urban problems related to energy. |
| | 2 nd | Water conservation, rain water harvesting, |
| | 3 rd | water shed management. |
| | 4 th | Resettlement and rehabilitation of people,its problems and concern. |
| 15 th | 1 st | Environmental ethics: issue and possible solutions. |
| | 2 nd | Climate change,global warming |
| | 3 rd | acid rain,ozone layer depletion |
| | 4 th | nuclear accidents and holocaust, case studies |
| 16 th | 1 st | Air (prevention and control of pollution) Act |
| | 2 nd | Water (prevention and control of pollution) Act |
| Week | Class Day | Topics to be Covered |

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| 16 th | 3 rd | Public awareness. |
| | 4 th | Unit 7: Human population and the environment Population growth and variation among nations. |
| 17 th | 1 st | Population explosion-family welfare program. |
| | 2 nd | Environment and human health. |
| | 3 rd | Human rights. |
| | 4 th | Value education |
| 18 th | 1 st | Value education |
| | 2 nd | Role of information technology in environment and human health |
| | 3 rd | Role of information technology in environment and human health |
| | 4 th | Revision . |

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