

ACADEMIC LESSON PLAN OF WINTER 2022

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| Discipline: ELECTRICAL | Semester: 3 rd sem (Sec-A) | Name of the Teaching Faculty: Lucky Rani Behuria |
| Subject: Environmental Studies | No. of days/per week class allotted:4p/week | Semester From: 15 th Sept 2021 to 22 nd Dec 2022 No. of weeks:15 weeks |
| Week | Class Day | Theory Topics |
| 1 st | 1 st | 1.1 Definition, scope and importance. |
| | 2 nd | 1.2 Need for public awareness. |
| | 3 rd | 2.1 Natural resources and associated problems. |
| | 4 th | 2.1.1. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people. |
| 2 nd | 1 st | 2.1.2. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems. |
| | 2 nd | 2.1.3. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources. |
| | 3 rd | 2.1.4. Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity. |
| | 4 th | 2.1.5. Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies. |
| 3 rd | 1 st | 2.1.6. Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification. 2.2 Role of individual in conservation of natural resources. |
| | 2 nd | 2.2 Role of individual in conservation of natural resources. |
| | 3 rd | 2.3 Equitable use of resources for sustainable life styles. |
| | 4 th | 3.1. Concept of an eco system. |
| 4 th | 1 st | 3.2. Structure and function of an eco system. 3.3. Producers, consumers, decomposers. |
| | 2 nd | 3.4. Energy flow in the eco systems. |
| | 3 rd | 3.5. Ecological succession. 3.6. Food chains, food webs and ecological pyramids. |
| | 4 th | 3.7. Introduction, types, characteristic features, structure and function of the following eco system |
| 5 th | 1 st | 3.8. Forest ecosystem. |
| | 2 nd | 3.9. Aquatic eco systems (ponds, streams, lakes, rivers, oceans) |
| | 3 rd | 4.1. Introduction-Definition: genetics, species and ecosystem diversity. |
| | 4 th | 4.2. Biogeographically classification of India. |
| 6 th | 1 st | 4.3. Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values. |
| | 2 nd | 4.4. Biodiversity at global, national and local level. (Conti...) |
| | 3 rd | 4.4. Biodiversity at global, national and local level. |
| | 4 th | 4.5. Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts. |
| 7 th | 1 st | 5.1. Definition Causes, effects and control measures. |

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| | 2 nd | 5.1.1 Air pollution. |
| | 3 rd | 5.1.2 Water pollution. |
| | 4 th | 5.1.3 Soil pollution |
| 8 th | 1 st | 5.1.4 Marine pollution. |
| | 2 nd | 5.1.5 Noise pollution. |
| | 3 rd | 5.1.6 Thermal pollution. |
| | 4 th | 5.1.7 Nuclear hazards. |
| 9 th | 1 st | 5.2. Solid waste Management: Causes, effects and control measures of urban and industrial wastes. (Conti...) |
| | 2 nd | 5.2. Solid waste Management: Causes, effects and control measures of urban and industrial wastes. |
| | 3 rd | 5.3. Role of an individual in prevention of pollution. |
| | 4 th | 5.4. Disaster management: Floods, earth quake, cyclone and landslides. |
| 10 th | 1 st | 6.1. Form unsustainable to sustainable development. |
| | 2 nd | 6.2. Urban problems related to energy. |
| | 3 rd | 6.3. Water conservation, rain water harvesting, water shed management. |
| | 4 th | 6.4. Resettlement and rehabilitation of people; its problems and concern. |
| 11 th | 1 st | 6.5. Environmental ethics: issue and possible solutions. |
| | 2 nd | 6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies. (Conti...) |
| | 3 rd | 6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies. |
| | 4 th | 6.7. Air (prevention and control of pollution) Act. |
| 12 th | 1 st | 6.8. Water (prevention and control of pollution) Act. |
| | 2 nd | 6.9. Public awareness. |
| | 3 rd | 7.1. Population growth and variation among nations. (Conti...) |
| | 4 th | 7.1. Population growth and variation among nations. |
| 13 th | 1 st | 7.2. Population explosion- family welfare program. |
| | 2 nd | 7.3. Environment and human health. (Conti..) |
| | 3 rd | 7.3. Environment and human health. |
| | 4 th | 7.4. Human rights. |
| 14 th | 1 st | 7.5. Value education |
| | 2 nd | 7.6. Role of information technology in environment and human health. (Conti..) |
| | 3 rd | 7.6. Role of information technology in environment and human health. |
| | 4 th | Discussion about population explosion effects on environment |

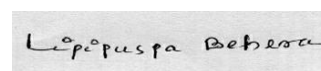
Lucky Ranj Behuria

Signature of Teaching Faculty

ACADEMIC LESSON PLAN OF WINTER 2022

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| Discipline: ELECTRICAL | Semester: 3 rd sem (Sec-B) | Name of the Teaching Faculty: Lipipuspa Behera |
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