**LESSON PLAN**

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| **Discipline:**Comp.Sc.& Engineering & E&TC Engg. | **Semester:**Third (3rd ) | **Name Of The Faculty:**Er. D.K.Nayak |
| **Subject:**Environmental Studies | **No of days/ week class allotted:**Six(6) | **Semester from date:** 01.07.24 **to Date:** 08.11.24**No of weeks: 15** |
| **WEEK** | **CLASS DAY** | **THEORY TOPICS** |
| 1st | 1st | **CHAPTER 1.THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES**Definition |
| 2nd | Scope and Importance, Need for Public Awareness |
| 3rd | ***Review***  |
| 4th | **CHAPTER 2.NATURAL RESOURCES**Natural Resources, Renewable and Non-renewable resources |
| 5th | Forest Resources and their use, Over-exploitation |
| 6th | Deforestation and Case studies Timber extraction mining  |
| 2nd | 1st | dams, benefits and problems and their effect on tribal people, |
| 2nd | Water Resources Use & over utilization of surface & ground water, flood. Drought , Conflict over Water, dam benefits & problems. |
| 3rd | Mineral Resources – Use & exploitation, environmental effects on extracting & using mineral resources.  |
| 4th | Food Resources – World food problems, changes causes by agriculture, fertilizer- pesticides problems, water logging, salinity. |
| 5th | Land Resources-Growing energy need Renewable and Non-renewable energy resources. Use of alternate energy source.. case studies.  |
| 6th | Land resources- land as a resources land degradation, man induces landslides, Soil erosion & Desertification  |
| 3rd | 1st | ***Monthly Test- 1*** |
| 2nd | Role of individual in conservation of natural resources. |
| 3rd | Equitable use of resources for sustainable life styles. |
| 4th | ***Review*** |
| 5th | **CHAPTER 3.SYSTEMS** Concept of an eco system. |
| 6th | Structure and function of an eco system. |
| 4th | 1st | Producers, consumers, decomposers. |
| 2nd | Energy flow in the eco systems. |
| 3rd | Ecological succession. |
| 4th | Food chains, food webs, Ecological pyramids. |
| 5th | Introduction, types, characteristic features, Structure and function of the following Eco system: |
| 6th | Forest ecosystem: |
| 5th | 1st | Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries). |
| 2nd | ***Review*** |
| 3rd | **CHAPTER 4.BIODIVERSITY AND IT’S CONSERVATION**Introduction-Definition: genetics, species and ecosystem diversity. |
| 4th | Biogeographically classification of India. |
| 5th | Value of biodiversity: consumptive use, productive use,  |
| 6th | social ethical, aesthetic and option values.  |
| 6th | 1st | ***Monthly Test- 2*** |
| 2nd | Biodiversity at global, national and local level. |
| 3rd | Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts. |
| 4th | ***Possible Question Answer Discussion*** |
| 5th | **CHAPTER 5. ENVIRONMENTAL POLLUTION.**Definition causes, effects & control measure of |
| 6th | Air pollution |
| 7th | 1st | Water pollution  |
| 2nd | Soil pollution |
| 3rd | Marine pollution |
| 4th | Noise pollution. |
| 5th | Thermal pollution |
| 6th | Nuclear hazards |
| 8th | 1st | Solid Waste Management- causes ,effects  |
| 2nd | Control measure of urban & industrial waste. |
| 3rd | Role of individual in prevention of pollution. |
| 4th | Disaster Management – Floods, Earth Quake, cyclone, & Land Slides |
| 5th | ***Review*** |
| 6th | **CHAPTER 6.SOCIAL ISSUES AND THE ENVIRONMENT**Form unsustainable to sustainable development. |
| 9th | 1st | ***Monthly Test- 3*** |
| 2nd | Urban problems related to energy. |
| 3rd | Water conservation, rain water harvesting, water shed management. |
| 4th | Resettlement and rehabilitation of people; its problems and concern. |
| 5th | Environmental ethics: issue and possible solutions. |
| 6th | Climate change, global warming, acid rain,  |
| 10th | 1st | Ozone layer depletion, nuclear accidents and holocaust, case studies. |
| 2nd | Air (prevention and control of pollution) Act. |
| 3rd | Water (prevention and control of pollution) Act. |
| 4th | Public awareness. |
| 5th | ***Possible Question Answer Discussion*** |
| 6th | **CHAPTER 7. HUMAN POPULATION AND THE ENVIRONMENT** Population growth and variation among nations. |
| 11th | 1st | ***Monthly Test- 3*** |
| 2nd | Cont. |
| 3rd | Population explosion- family welfare program. |
| 4th | Environment and human health. |
| 5th | Cont. |
| 6th | Human rights  |
| 12th | 1st | Value education |
| 2nd | Role of information technology in environment and human health. |
| 3rd | ***Review*** |
| 4th | Review Class for Chapter No.- 03 |
| 5th | Review Class for Chapter No.- 04 |
| 6th | Review Class for Chapter No.- 04 |
| 13th | 1st | Review Class for Chapter No.- 05 |
| 2nd | Review Class for Chapter No.- 06 |
| 3rd | Review Class for Chapter No.- 06 |
| 4th | Review Class for Chapter No.- 07 |
| 5th | Review Class for Chapter No.- 01 |
| 6th | Review Class for Chapter No.- 02 |
| 14th | 1st | Review Class for Chapter No.- 03 |
| 2nd | Review Class for Chapter No.- 03 |
| 3rd | Review Class for Chapter No.- 04 |
| 4th | Review Class for Chapter No.- 04 |
| 5th | Review Class for Chapter No.- 05 |
| 6th | Review Class for Chapter No.- 06 |
| 15th | 1st | Review Class for Chapter No.- 06 |
| 2nd | Review Class for Chapter No.- 07 |
| 3rd | Previous Year (S- 21) Question Answer Discussion |
| 4th | Previous Year (S- 22) Question Answer Discussion |
| 5th | Previous Year (S- 23) Question Answer Discussion |
| 6th | Previous Year (S- 23) Question Answer Discussion |