Govt. Polytechnic Education Society, Manesar (Gurugram)

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| Faculty name |  | NEERAJ KUMAR |
| Discipline |  | Computer Engineering |
| Semester |  | 2 |
| Subject |  | Environmental Studies and Disaster Management |
| Duration of Lesson Plan |  | 15 weeks (February-June 2024) |
| **Work Load per week** |  | **Lectures -02 Hours** |
| **Week** | **Theory** |
| **Lecture day** | **Topic (including assignment/test)** |
| 1st | 1st | **Unit-1**Introduction and basic discussion about our Environment. Basics of Ecology |
| 2nd | Ecosystem- concept and sustainable development |
| 2nd | 1st | Renewable and Non-renewable resources |
| 2nd | Advantages, disadvantages of renewable and nonrenewable energy |
| 3rd | 1st | Rain water harvesting |
| 2nd | Advantages, disadvantages of Rain water harvesting |
| 4th | 1st | Deforestation – its effects. |
| 2nd | Deforestation – its control measures |
| 5th | 1st | **UNIT-II:** Air and Noise PollutionAir Pollution: Source of air pollution, Effect of air pollution on human health. |
| 2nd | **Assignment-1 Sessional Test-1** |
| 6th | 1st | Effect of air pollution on economy. Air pollution control methods. |
| 2nd | Noise Pollution: Source of noise pollution. Unit of noise. Effect of noise pollution, Acceptable noise level, Different method of minimizing noise pollution. |
| 7th | 1st | **UNIT III**Water and Soil PollutionWater Pollution: Impurities in water, Cause of water pollution, Source of water pollution |
| 2nd | Effect of water pollution on human health, Concept of DO, BOD, COD. |
| 8th | 1st | Prevention of water pollution- Water treatment processes, Sewage treatment. Water quality standard. |
| 2nd | Soil Pollution :Sources of soil pollution, Effects and Control of soil pollution |
| 9th | 1st | Types of Solid waste- House hold, Industrial, Agricultural, Biomedical, Disposal of solid waste |

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|  | 2nd | Solid waste management E-waste, E – waste management. |
| 10th | 1st | **Assignment-2 Sessional Test-2** |
| 2nd | **UNIT IV**Impact of Energy Usage on EnvironmentGlobal Warming, Green House Effect, Depletion of Ozone Layer. |
| 11th | 1st | Global Warming, Green House Effect, Acid Rain. Eco-friendly Material |
| 2nd | Recycling of Material |
| 12th | 1st | Concept of Green Buildings, Concept of Carbon Credit |
| 2nd | Concept of Green Buildings, Concept of Carbon footprint. |
| 13th | 1st | **UNIT V**Disaster Management Different Types of Disaster |
| 2nd | Natural Disaster: such as Flood, Cyclone, Earthquakes and Landslides etc |
| 14th | 1st | Man-made Disaster: such as Fire, Industrial Pollution, Nuclear Disaster |
| 2nd | Biological Disasters, Accidents (Air, Sea Rail & Road) |
| 15th | 1st | Structural failures(Building and Bridge), War & Terrorism etc |
| 2nd | Disaster Preparedness Plan, Prediction, Early Warnings and Safety Measures of Disaster. |
| 16th |  | **Assignment-3 Sessional Test-3** |