**Lesson Plan**

Name : Ms. Ankita

Discipline : Mech. Engg. , Auto. Engg.

Year : 1st semester

Session : 2023-2024

Subject : ES &DM

Code : 220016

**Teaching Load: 2 Lectures per week**

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| **Week** | **Theory** | |
| **Lecture Day** | **Topic** |
| **I** | **1** | **Unit1:- Introduction** Basics of Ecology , Eco system Concept and sustainable development |
| **2** | Sources ,advantages ,disadvantages of renewable and non-renewable energy |
| **II** | **1** | Rain Water Harvesting |
| **2** | Deforestation – its effects and control measures |
| **III** | **1** | **Unit2:- Air and Noise Pollution** Air Pollution: Source of Air Pollution |
| **2** | Effect of Air Pollution on Human Health, Economy, Air Pollution control Methods |
| **IV** | **1** | Noise Pollution: Sources of Noise Pollution, unit of noise ,Effect of Noise Pollution, Acceptable Noise Level, different Methods of minimizing Noise Pollution |
| **2** | Revision of Above topics |
| **V** | **1** | **Unit3:- Water and Soil Pollution** Water Pollution: Impurities in water, Cause of water Pollution |
| **2** | Sources of water Pollution. Effect of water pollution on human health |
| **VI** | **1** | First Sessional Test(Tentative) |
| **2** | First Sessional Test(Tentative) |
| **VII** | **1** | Concept of DO ,BOD, COD |
| **2** | Prevention of water Pollution- water treatment processes |
| **VIII** | **1** | Sewage treatment ,Water quality standard |
| **2** | Soil Pollution: Sources of soil Pollution |
| **IX** | **1** | Effect and control of soil pollution |
| **2** | Type of solid waste- House hold, Industrial, Agricultural, Bio-Medical, Disposal of Solid waste. |
| **X** | **1** | Solid waste management E-waste ,E-waste management |
| **2** | **Unit4:- Impact of Energy Usage on Environment** Global Warming ,Green House Effect , Depletion of Ozone Layer |
| **XI** | **1** | Second Sessional Tests(Tentative) |
| **2** | Second Sessional Tests(Tentative) |
| **XII** | **1** | Acid Rain .Eco Friendly Material, Recycling of Material, Concept of Green Building |
| **2** | Concept of Carbon credit and Carbon Foot Print |
| **XIII** | **1** | **Unit5:- Disaster Management** **A**  Different type of Disaster ,Natural Disasters such as Flood ,Cyclone ,Earth Quake and Landslides etc. |
| **2** | Manmade Disasters such as Fire, Industrial Pollution, Nuclear Disasters, biological Disasters. |
| **XIV** | **1** | Accidents(Air , Sea Rain and Road) , Structural Failures (Building and Bridges) , War and Terrorism |
| **2** | B Disaster Preparedness Disaster Preparedness plan : Prediction , Early warnings and safety measures of Disaster Psychological Response and Management (Trauma, Stress, Rumour and Panic) |
| **XV** | **1** | Third Sessional Test(Tentative) |
| **2** | Third Sessional Test(Tentative) |