

# **ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT**

## **Weeks 1-3: Unit I – Introduction**

### **Week 1**

- **Lecture 1:** Basics of Ecology, Ecosystem Concept, and Sustainable Development
- **Lecture 2:** Renewable and Nonrenewable Energy: Sources, Advantages, and Disadvantages

### **Week 2**

- **Lecture 3:** Rainwater Harvesting: Importance and Methods
- **Lecture 4:** Deforestation: Effects and Control Measures

### **Week 3**

- **Lecture 5:** Recap of Unit I with Practical Examples
  - **Lecture 6:** Practice Quiz and Discussion on Unit I
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## **Weeks 4-5: Unit II – Air and Noise Pollution**

### **Week 4**

- **Lecture 7:** Air Pollution: Sources, Effects on Health, and Economy
- **Lecture 8:** Air Pollution Control Methods

### **Week 5**

- **Lecture 9:** Noise Pollution: Sources, Effects, and Acceptable Levels
  - **Lecture 10:** Methods to Minimize Noise Pollution
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## **Weeks 6-8: Unit III – Water and Soil Pollution**

### **Week 6**

- **Lecture 11:** Water Pollution: Impurities, Causes, and Sources
- **Lecture 12:** Effects of Water Pollution and Concepts of DO, BOD, COD

### **Week 7**

- **Lecture 13:** Prevention of Water Pollution: Water and Sewage Treatment

- **Lecture 14:** Soil Pollution: Sources, Effects, and Control

#### **Week 8**

- **Lecture 15:** Types of Solid Waste and Disposal Methods
  - **Lecture 16:** Solid Waste and E-Waste Management
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### **Weeks 9-10: Unit IV – Impact of Energy Usage on Environment**

#### **Week 9**

- **Lecture 17:** Global Warming, Greenhouse Effect, and Ozone Layer Depletion
- **Lecture 18:** Acid Rain: Causes, Effects, and Prevention

#### **Week 10**

- **Lecture 19:** Eco-Friendly Materials and Recycling of Materials
  - **Lecture 20:** Concepts of Green Buildings, Carbon Credit, and Carbon Footprint
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### **Weeks 11-13: Unit V – Disaster Management**

#### **Week 11**

- **Lecture 21:** Natural Disasters: Flood, Cyclone, Earthquakes, Landslides
- **Lecture 22:** Man-Made Disasters: Fire, Industrial Pollution, Nuclear Disasters

#### **Week 12**

- **Lecture 23:** Biological Disasters and Accidents (Air, Sea, Rail, Road)
- **Lecture 24:** Structural Failures (Building, Bridge), War, and Terrorism

#### **Week 13**

- **Lecture 25:** Disaster Preparedness: Planning and Early Warnings
  - **Lecture 26:** Psychological Response and Management: Trauma, Stress, Rumors
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### **Weeks 14-16: Recap and Assessment**

#### **Week 14**

- **Lecture 27:** Comprehensive Recap of Units I-II
- **Lecture 28:** Comprehensive Recap of Units III-IV

#### **Week 15**

- **Lecture 29:** Practical Examples and Discussions on Disaster Management (Unit V)
- **Lecture 30:** Practice Quiz and Mock Test

#### **Week 16**

- **Lecture 31:** Review of Entire Syllabus, Feedback, and Doubts Clearing
- **Lecture 32:** Final Preparation and Exam Readiness