

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2020**

**ENVIRONMENTAL SCIENCE AND DISASTER MANAGEMENT**

[Maximum Marks: 75]

[Time: 2.15 Hours]

**PART-A**

(Answer *any three* questions in one or two sentences. Each question carries 2 marks)

- I. 1. Explain the problems due to de-forestation.  
2. What is meant by Biomagnifications?  
3. List any two effects of oil pollution.  
4. Define hazard zonation map.  
5. State two measures to control thermal pollution. (3 x 2 = 6)

**PART-B**

(Answer *any four* of the following questions. Each question carries 6 marks)

- II 1.Explain impacts on food production due to adoption of modern agricultural practices.  
2. Describe the biotic and abiotic components of an ecosystem.  
3. Describe the phenomenon of Ecological Succession.  
4. Identify the sources contributing to water pollution.  
5. State various measures to control noise pollution.  
6. Explain assessment, evaluation and management of risk.  
7. Identify the distinction between hazard and disaster. (4 x 6 = 24)

**PART-C**

(Answer *any of the three units* from the following. Each full question carries 15 marks)

**UNIT – I**

- III (a) State the importance of water as a resource. (8)  
(b) Explain about forest resources. (7)

**OR**

- IV (a) Distinguish between renewable and non renewable sources of energy. (8)  
(b) Why land is considered as a resource? (7)

**UNIT – II**

- V (a) Explain food chain and food web with suitable figures. (8)  
(b) Explain the types, structure and characteristic features of grassland ecosystem. (7)

**OR**

- VI (a) Describe the importance of biodiversity and the need to conserve it. (8)  
(b) Identify the causes of global warming and the effects due to that. (7)

**UNIT- III**

- VII (a) Explain Air pollution. (8)  
(b) Describe Marine pollution. (7)

**OR**

- VIII (a) Explain nuclear pollution. (8)  
(b) Explain various methods of solid waste management specific to each category of waste. (7)

**UNIT - IV**

- IX (a) Define Hazard, Disaster, Vulnerability and Risk. (8)  
(b) Identify the classifications of hazards based on various aspects. (7)

**OR**

- X (a) Explain Use of Early warning systems based on IT enabled services like GIS, GPS, MIS, DDS in disaster management. (8)  
(b) Identify and explain various operations to be carried out during pre-disaster phase. (7)

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