

Roll No.

Subject Code—2097

P. G. Diploma EXAMINATION
ENVIRONMENTAL MANAGEMENT
PGDEM-05

Energy and Disaster Management

Time : 3 Hours

Maximum Marks : 100

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Give an account of energy scenario in India. 10
- (b) Where are the major fossil reserves of India located ? Enumerate the environmental impacts of petroleum production. 10

(1-10-6-09)

P.T.O.

2. Define the following terms : 2×10

- (a) CNG
- (b) LPG
- (c) Calorific Value
- (d) Diesel Fuel
- (e) Ethane
- (f) Benzene
- (g) Crude Oil
- (h) Fossil Fuel
- (i) Octane Number
- (j) Cetane Number.

Unit II

3. What is Biogas ? Name the various models of biogas plants and describe any *two* of them. 20

4. (a) Define Renewable energy. What are its sources ? 5

(b) What are the main applications of geothermal energy ? 5

(c) Write short notes on any two of the following : 2×5

- (i) Energy Plantation
- (ii) Anaerobic Digestion
- (iii) Hydrogen as a fuel.

Unit III

5. Define Solar Energy. What types of collectors are used to entrap solar energy ? Write different application of solar energy. 20

6. Write short notes on any *four* of the following : 20

- (a) Solar Cooker
- (b) Energy Conservation
- (c) Solar Desalinization
- (d) Solar Water Pump
- (e) Solar Pond.

Unit IV

7. (a) Define Earthquakes. What are the causes of earthquakes ? 10

- (b) Define Landslides. What are the reasons of Landslides. How can it be prevented ? 10

8. Write short notes on any *two* of the following :

- (a) Technological Hazard
- (b) Flood Hazard
- (c) Storm and Cyclone Hazard
- (d) Natural Hazard. 2×10