

June, 2006
E- JUN 2006

Subject Code—4250

P. G. Diploma EXAMINATION

(New Scheme)

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.

Unit I

1. (a) Which fossil fuel is the cleanest ?
Comment.
- (b) Give brief account of energy scenario in India.

2. (a) Explain the following terms :
- (i) Natural Gas
 - (ii) Fuel Rate
 - (iii) Calorific value
 - (iv) Blended fuel oil
 - (v) Crude oil
 - (vi) CNG
 - (vii) LNG
 - (viii) LPG
 - (ix) Ethanol
 - (x) Renewable energy.
- (b) Where are the major fossil fuel reserves of India located ?

Unit II

3. (a) Define the following terms :
- (i) Tidal energy
 - (ii) Geothermal energy
 - (iii) Solar cell
 - (iv) Biomass energy
 - (v) Pyrolysis
 - (vi) Solar desalinization
 - (vii) Aerobic digestion
 - (viii) Photosynthesis.

- (b) Define biogas. Name the various models of biogas plant. Explain any *one* of them.
4. Write short notes on the following :
- Energy plantation
 - Anaerobic fermentation
 - Improved chulha programme
 - Solar water heater.

Unit III

5. (a) Define photovoltaic cell. Explain its principle and structure of PV cell.
- (b) Enumerate the advantages and disadvantages of the solar cell system.
6. Write down short notes on any *four* of the following :
- Solar collector
 - Solar pond
 - Solar Cooker
 - Solar pump
 - Solar still.

Unit IV

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

- (i) Earthquakes
- (ii) Flood hazard
- (iii) Cyclones.

8. Define the following terms :

- (i) Landslides
- (ii) Technological hazard
- (iii) Storms
- (iv) Tornadoes
- (v) Hurricanes
- (vi) Volcanoes
- (vii) Natural hazard
- (viii) Drought.