

**2E1024**

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**2E1024****B. Tech. II Semester (Main/Back) Examination, June/July-2011****Common for All Branches****204 Environmental Engineering & Disaster Management****Time : 3 Hours****Maximum Marks : 80****Min. Passing Marks : 24****Instructions to Candidates:**

*Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

**Unit - I**

1. a) "Education of Environmental Science is necessary for sustainability of future". Verify this statement. Also, explain about different components of global environment. (8)
- b) Discuss about adverse effects of environmental pollution and control strategies. (8)

**OR**

- a) Write short notes on followings :- (8)
- i) Biotic and abiotic environment and its mutual relationship.
- ii) Environmental Acts and Regulations.
- b) Comment on :-
- i) Potential and present status of renewable sources of energy in India.
- ii) Energy flow in ecosystem. (8)

## Unit - II

2. a) What is water pollution? Describe different water pollutants. (8)
- b) Give the flow chart for 'Domestic Waste water Management'. (8)

### OR

- a) Explain the followings :- (8)
- i) Environmental Impact Assessment (EIA)
  - ii) Anaerobic digestion.
- b) Give your opinion on :- (8)
- i) Quality parameters of potable water
  - ii) "Rain Water Harvesting (RWH) is the only solution for water crisis in Rajasthan".

## Unit - III

3. a) What is Solid Waste Management (SWM)? Discuss all steps involved in an ideal SWM practice. (8)
- b) Explain harmful effects of Air pollution and suggest different methods to control Air pollution. (8)

### OR

- a) Write notes on :- (8)
- i) Global warming : Its causes and consequences
  - ii) Acid Rain and its adverse effects.
  - iii) Noise pollution and its control
  - iv) Sanitary Landfill
- b) What is Hazardous material? What can we do for its better treatment and disposal? (8)

**Unit - IV**

4. a) What is Disaster? Explain various phases of Disaster Management Cycle. (8)
- b) What do you know about "Vulnerability of Indian Continent to different types of disaster"? (8)

**OR**

- a) Write an essay on different DOs and DON'Ts for safety during disasters? (8)
- b) Describe briefly the followings Cyclone, Flood, Landslides, Environmental Hazards and Chemical disaster. (8)

**Unit - V**

5. a) What is Plate Tectonic Theory? Explain the occurrence of Earthquakes on the basis of this theory. (8)
- b) Give account on
- i) Scales of Earthquakes
  - ii) Earthquake resistant Houses and Construction practices (8)

**OR**

- a) Explain the following terms - (8)
- i) Earthquake Magnitude
  - ii) Focal Depth and Epicenter
  - iii) Earthquake Energy
  - iv) Types of Earthquakes
- b) Explain the concept of Seismic zooming. How can you explain the relationship between Tsunami and Earthquakes? (8)