

2E1024	Roll No. _____	[Total No. of Pages : 3]
	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)