

Sub Environmental Studies

Paper Code - ETE/114

\* Q.1 is compulsory. Attempt any four from others.

- Q.1(a) What do you mean by Ecological Succession?
- (b) Differentiate between producers, consumers and decomposers.
- (c) Explain the causes of loss of species.
- (d) What are the impacts of overgrazing?
- (e) Explain the advantages and disadvantages of wind energy.
- (f) Define BOD and COD. Which one of these is a better parameter for determining the strength of a polluted wastewater and why?
- (g) Differentiate between composting and Vermicomposting.
- (h) Explain the mechanism of photodegradation of polymers.
- (i) Explain Dose-Dose response relationship with diagram.
- (j) Discuss the steps you will take in preparing for cyclone.

Q.2

- (a) Discuss the biotic and abiotic components of forest and pond ecosystem.
- (b) What are the main objectives of conservation of biodiversity?
- (c) Give three main causes of extinction of a species by human intervention.

Q.3

Write short notes on:

- (i) Consumptive use value of biodiversity
- (ii) Indirect values assigned to biodiversity

Q.4

- (a) What is nuclear energy? Discuss its potential and utilization in India.
- (b) Discuss the use of bio-energy as a non-conventional renewable source of energy.
- (c) Discuss the effect of deforestation by taking case study of some area.

- Q.5
- Critically examine the role of chemical fertilizers and pesticides use in agriculture.
  - How biothermal energy is utilized for electrical power-generation.
  - Explain - how the shifting cultivation and desertification are the main causes of land degradation.

Q.6 Explain

- State the various methods by which problem of solid waste can be minimized.
- Explain the Role of Bioremediation in marine pollution.
- Biopolymers are good alternative to traditional polymer. Illustrate with examples.

Q.7

- Define Atom Economy. Illustrate with examples.
- Discuss the biochemical effect of Pb, how Pb-poisoning is treated by EDTA.

Q.8 (a) Discuss the important initiatives taken at national, state and other level to prevent the disaster.

(b) Give some environment protection act enacted by Govt.

Q.9

Write - Short note

- Nuclear Accidents.
- Bhopal gas-disaster 1984.
- Particulates as pollutants.
- Acid rain and its effects.