

Exam.Code:0944
Sub. Code: 33919

2056
B.E. (Mechanical Engineering)
Eighth Semester
HS-806: Environment Sciences

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

1. (i) What is the main purpose of Environmental Science?
(ii) What does the "trophic structure" of an ecosystem describe?
(iii) What are the two main characteristics used to define a biodiversity hotspot?
(iv) State two significant consequences of global warming.
(v) Name four primary sources of water pollution. 5X(2)

UNIT- I

2. Explain the key objectives of environment conservation. Discuss the importance of conserving different natural resources such as soil, water, wildlife and forests, providing a detailed justification for each. (10)
3. (i) Explain the components of an ecosystem. Describe how biotic and abiotic factors interact to maintain ecological balance.
(ii) Describe the process of energy flow through a food chain. Why does energy decrease as it moves to higher trophic levels? (2 x 5)
4. (i) Explain the greenhouse effect. Discuss the primary human activities that lead to the enhanced greenhouse effect.
(ii) Describe at least three major consequences of global warming on the environment and human society. (2 x 5)

UNIT-II

5. Describe the main sources of water pollution. How does it effect human health? What are its environmental consequences? Describe the measures that should be taken to prevent Water pollution. (10)
6. What is waste management and why is it important? Explain the systematic process of solid and hazardous waste management. (10)
7. (i) Explain the major harmful effects of noise pollution on human health.
(ii) Classify the primary sources of noise pollution in modern urban environments. What are the permissible noise level limits for industrial, commercial, residential and silence zones? (2 x 5)

x-x-x