

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem- 1<sup>st</sup> Regular Examination January 2011

Subject code: 110007

Subject Name: Environmental studies

Date: 10/ 01 /2011

Time: 10.30 am - 01.00 pm

Total Marks: 70

### Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q 1** (a) Define the terms: **06**  
(1) Ecosystem  
(2) Biotic & abiotic components  
(3) Environment  
(4) Pollution  
(5) Sound Pressure level  
(6) Biosphere
- (b) Answer in brief **08**  
(1) Explain Eutrophication. Highlight causes and effects of Eutrophication on lake.  
(2) Explain the human interference on “Nitrogen Cycle” with the help of a neat sketch.
- Q 2** (a) Write a note on “Green House Effect “ and its effect on Global Warming? **07**  
(b) (1) Explain the concept of Energy flow in an ecosystem and trophic levels. **04**  
(2) Differentiate between “Food chain” and “Food web”. **03**
- OR**
- (b) Write a note on causes of deforestation. **07**
- Q.3** (a) Enlist and explain any two sources of water pollution **08**  
(b) Explain the effects of noise on people. **06**
- OR**
- Q.3** (a) Give the classification of water quality parameters and explain any two. **06**  
(b) Define land pollution and explain the causes of land pollution. **04**  
(c) Explain desertification highlighting its causes . **04**
- Q.4** (a) Explain how population increase causes pressure on natural resources, urbanization and rapid industrialization. **06**  
(b) Enlist the features of renewable and non renewable sources of energy. **04**  
(c) Prepare a list of fossil fuels and explain the environmental impacts of any one. **04**
- OR**
- Q.4** (a) Write a note on applications of solar energy explaining its limitations. **06**  
(b) Which are the important theories of population growth? Explain any one. **04**  
(c) Write a note on “Population explosion” **04**
- Q.5** (a) Explain “Acid Rain as a major Environmental problem. **06**  
(b) Give the classification of air pollutants based on source. **04**  
(c) Enlist the important factors affecting air pollution and explain any one. **04**
- OR**
- Q.5** (a) Write a short note on “ Impacts of Technology on Environment” **07**  
(b) What are the effects of Carbon monoxide and Particulate Matter in air on human health ? **07**

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