

**GUJARAT TECHNOLOGICAL UNIVERSITY**

B.E. Sem-I Examination January 2010

**Subject code: 110007****Date: 08 / 01/ 2010****Subject Name: Environmental studies****Time: 11.00 am – 1.30 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) Why environmental education is important? Explain the impact of technology and development on environment. **07**
- (b) Define environment and give composition of atmosphere and lithosphere. **07**
- Q.2** (a) Describe the concept of ecosystem and explain the relationship among its different parts. **07**
- (b) What do you understand by biogeochemical cycle? Explain the oxygen cycle with sketch. **07**
- OR**
- (b) Give classification of Ecology and explain in detail the structure of an ecosystem. **07**
- Q.3** (a) What is ecological pyramid? Describe the pyramid of mass and energy with sketch. **07**
- (b) Differentiate the food chain and food web and explain the food chain and food web with one example for each. **07**
- OR**
- Q.3** (a) Comment on the urban energy problems and discuss the effect of over population over energy problems in India. **07**
- (b) What is population growth? How is it calculated? Describe the factors affecting population growth. **07**
- Q.4** (a) Give the classification of natural resources. Explain the conventional and non conventional energy resources. **07**
- (b) Describe the parameters of water quality standards for drinking water in India and state their significances. **07**
- OR**
- Q.4** (a) Enumerate different air pollutants and explain its effects on human beings. **07**
- (b) Describe uses and overuses of land and forest. **07**
- Q.5** (a) Enlist global environmental problems and discuss any one. **07**
- (b) Write short notes on (i) Acid rain (ii) Environmental degradation **07**
- OR**
- Q.5** (a) Discuss about effects of noise pollution and its control. **07**
- (b) Explain (i) Hydrological cycle (ii) Pond ecosystem. **07**

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