

**GUJARAT TECHNOLOGICAL UNIVERSITY**

B.E Sem-I/II Examination June-July 2011

**Subject code: 110007****Subject Name: Environmental Studies****Date: 4/7/2011****Total Marks: 70****Time: 10:30 am to 1:00pm****Instructions:**

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

**Q.1 (a)** What is the role of environmental engineer? Discuss the impact of technological development on environment. **07**

**(b)** Describe the structure of atmosphere and tabulate the compositions of atmosphere. **07**

**Q.2 (a)** Justify that energy flow in ecosystem is unidirectional and non cyclic and explain the nutrient cycling in ecosystem. **07**

**(b)** What is the meaning of biogeochemical cycle? Draw the carbon cycle and explain its functioning. **07**

**OR**

**(b)** Give the classification of Ecology and explain the different parts of an ecosystem. **07**

**Q.3 (a)** What is meant by Ecological Pyramid? Describe the pyramid of biomass for terrestrial and aquatic ecosystem. **07**

**(b)** Define food chain and discuss different trophical levels of it. **07**

**OR**

**Q.3 (a)** Differentiate renewable and non renewable energy resources and discuss the effect of overpopulation on energy problems. **07**

**(b)** Define population growth and describe the different ways to control population growth. **07**

**Q.4 (a)** Explain the conventional and non conventional energy resources. Discuss use of solar energy in India **07**

**(b)** Describe the uses of different water resources and explain any two techniques of water conservation used in India. **07**

**OR**

**Q.4 (a)** Enumerate different primary and secondary air pollutants and explain the effect of carbon monoxide on human beings. **07**

**(b)** Give the classification of forests and discuss the effects of deforestation on society. **07**

**Q.5 (a)** Discuss briefly current global environmental problems and discuss green house effect in details. **07**

**(b)** Write short notes on (i) Land degradation (ii) Ozone depletion **07**

**OR**

**Q.5 (a)** What is Noise pollution? How is it measured? Describe the effects of noise pollution on human and animals. **07**

**(b)** What are different types of pollutions? Describe the causes and effects of Eutrophication **07**

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