Seat No.: Enrolment No

Subject code: 110007

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-I Examination January 2010

Subject Name: Environmental studies

Date: 08 / 01/ 2010 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 07 technology and development on environment. (b) Define environment and give composition of atmosphere and 07 lithosphere. (a) Describe the concept of ecosystem and explain the relationship 07 **Q.2** among its different parts. (b) What do you understand by biogeochemical cycle? Explain the 07 oxygen cycle with sketch. OR (b) Give classification of Ecology and explain in detail the structure of an 07 ecosystem. Q.3 (a) What is ecological pyramid? Describe the pyramid of mass and 07 energy with sketch. (b) Differentiate the food chain and food web and explain the food chain 07 and food web with one example for each. Q.3 (a) Comment on the urban energy problems and discuss the effect of 07 overpopulation over energy problems in India. (b) What is population growth? How is it calculated? Describe the factors 07 affecting population growth. **Q.4** (a) Give the classification of natural resources. Explain the conventional 07 and non conventional energy resources. (b) Describe the parameters of water quality standards for drinking water 07 in India and state their significances. (a) Enumerate different air pollutants and explain its effects on human 07 **Q.4** beings. **(b)** Describe uses and overuses of land and forest. **07** 0.5 (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 *****