

GUJARAT TECHNOLOGICAL UNIVERSITY**B.E. Sem-I & II Remedial Examination Nov/ Dec. 2010****Subject code: 110007****Subject Name: Environmental Studies****Date: 04 /12/ 2010****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) Discuss the physical components of environment. **04**
 (b) Explain the need for public awareness about the environment and its degradation. **05**
 (c) Define the followings. (Any five) **05**
 (i) Ecology (ii) Total Fertility Rate (iii) Zero Population Growth (iv) Food Web
 (v) Global Warming (vi) Shifting Cultivation (vii) Estuaries (viii) Hydrological Cycle
- Q.2** (a) Discuss the structural components of ecosystem. Explain food chain with a neat sketch. **07**
 (b) Explain how forest helps in maintaining ecological balance. **07**
- OR**
- (b) Afforestation is the need of the hour. Justify. **07**
- Q.3** (a) Define the term population explosion and enumerate the causes of rapid population growth. Enlist the different method of population forecasting. **07**
 (b) Discuss the structure and function of a desert ecosystem. Explain with neat sketch pyramids of number in parasitic food chain energy flow **07**
- OR**
- Q.3** (a) What is biogeochemical cycle? Explain the basic nitrogen cycle and how humans interfere with nitrogen cycle. **07**
 (b) Explain demographic transition theory .Suggest how population can be controlled? **07**
- Q.4** (a) Define acid rain. How does it form and what are its ill effects? **07**
 (b) What do you understand by primary and secondary air Pollutant? Discuss the health hazards of air pollution? **07**
- OR**
- Q.4** (a) Define Eutrophication, its causes and effects. **07**
 (b) What do you understand by acceptable noise level .Briefly describe the sources and effect of noise pollution. **07**
- Q.5** (a) Differentiate between **08**
 (i) Deforestation and Desertification (ii) Conventional and Non-Conventional Energy Source (iii) Ecology and Ecosystem (iv) Pollution and Pollutant
 (b) Explain Green House Effect. What are various sources of green house gases. **06**
- OR**
- Q.5** (a) What is energy conservation? Why do we need to conserve energy? **07**
 (b) How depletion of Ozone layer does takes place in the atmosphere? Explain the ill effect of Ozone depletion. **07**
