

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER- 1st / 2nd • EXAMINATION – WINTER 2013

Subject Code: 110007

Date: 18-12-2013

Subject Name: Environmental Studies

Time: 10:30 am – 01:00 pm

Total Marks: 70

Instructions:

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q.1** (a) Industrial revolution plays a major role in degrading the environment. Justify the statement. **7**
- (b) Discuss the importance of environmental studies. Explain the components of environment. **7**
- Q.2** (a) Differentiate food chain and food web. Explain the concept of “flow of energy in an ecosystem”. **7**
- (b) What are ecological pyramids? Discuss in brief. **7**
- Q.3** (a) Discuss the objectives of ecology and explain how Nitrogen cycle helps in maintaining ecological balance. **7**
- (b) Define ecosystem. Enumerate different types of ecosystem and explain any two. **7**
- Q.4** (a) Define Zero population growth. Discuss the factors affecting population growth and effect of population explosion on environment. **7**
- (b) What is the ecological importance of forest? Discuss the causes and consequences of deforestation. **7**
- Q.5** (a) Discuss the merits and demerits of nuclear energy options. Discuss the impact of fossil fuel usage on environment. **7**
- (b) What are the sources of water pollution? Explain Eutrophication and its harmful effect. **7**
- Q. 6** (a) Write classification of air pollutants. Discuss the effects of air pollution on human health. **7**
- (b) Name the gases responsible for global warming. Write causes and effects of global warming on global climate. **7**
- Q.7** (a) Differentiate deforestation and desertification. Discuss the effect of land pollution and control measures. **7**
- (b) Explain how acid rain is formed. Discuss its ill effects **7**