

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-I & II EXAMINATION – WINTER 2015

Subject Code: 110007

Date:01/01/2016

Subject Name: Environmental Studies

Time: 10:30am to 01:00pm

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) Define the following: 07**
- (i) Ecosystem (ii) Ecology (iii) Eutrophication (iv) mortality rate
(iv) air pollution (v) biomagnification (vi) ecological pyramids
(vii) Food web
- (b) Why environmental education is important? What are the different ways to impart environmental education? 07**
- Q.2 (a) What is biogeochemical cycle? Define the terms (i) precipitation (ii) interception (iii) evaporation (iv) transpiration (v) runoff and (vi) infiltration in the context of Hydrologic cycle. 07**
- (b) Enlist conventional and nonconventional energy resources and explain their advantages and limitations. 07**
- Q.3 (a) Describe Nitrogen cycle with a neat sketch. Write the significance of nitrogen in biotic components? 07**
- (b) Give the classification of water pollutants and discuss their sources and effects. 07**
- Q.4 (a) Enlist major ecosystems and describe forest ecosystem in detail. 07**

- (b) What do you mean by population explosion? What are the demographic projections for population growth? **07**
- Q.5** (a) Justify land as a resource. What are the sources and effects of land pollution? **07**
- (b) Explain the environmental factors affecting human habitation. Describe the reasons for over population and suggest some control measures. **07**
- Q.6** (a) What is an ecosystem? Enlist major ecosystems and describe marine ecosystem in detail. **07**
- (b) Give the classification of forests and explain the causes and effects of deforestation. **07**
- Q.7** (a) Discuss global environmental problems and explain any two in detail. **07**
- (b) Write a short note on (i) Eutrophication (ii) Ambient air quality standards **07**
