

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM- I / II Winter Examination-Dec.-2011

Subject code: 110007**Date: 20/12/2011****Subject Name: Environmental Studies****Time: 10.30 am -1.00 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)** Give reasons for validity of the following statements . try any **seven** only. **07**
- (i) Environmental education is essential for engineers
 - (ii) Decomposer are not essential in any ecosystem
 - (iii) The producer is backbone of an ecosystem
 - (iv) Primary consumers are more safe than secondary consumers
 - (v) Energy flow in ecosystem is not required.
 - (vi) Ecosystem is healthy if more number of a specific organisms are present in it.
 - (vii) Presence of toxicants in water gets magnified in food pyramid of an aquatic ecosystem
 - (viii) Photosynthesis is kitchen of the biosphere
 - (ix) All organisms are interdependent in an ecosystem
 - (x) A rice field is an artificial ecosystem
- (b)** Define/Explain any Seven of followings **07**
- (i) Atmospheric Environment (ii) Ecosystem (iii) Water pollution (iv) Tertiary Consumers (v) Reforestation (vi) Bioaccumulation (vii) Eutrophication (viii) Herbivores (ix) Biomagnification (x) Trophic Level (xi) omnivores (xii) Ecological Pyramid (xiii) Decomposers (xiv) Predator
- Q.2 (a)** Why is Environmental education essential? What is relationship between Man and Environment? Do you think that man has protected environment? **07**
- (b)** Enumerate all classifications of Ecology and ecosystems and write in detail structure and functions of an ecosystem **07**
- Q.3 (a)** Describe importance of biochemical cycle in the life of a biotic. Describe Nitrogen cycle with sketch in detail **07**
- (b)** Narrate renewable and nonrenewable natural resources. What are stresses produced by human-being by overexploitations of them? **07**
- Q.4 (a)** Describe in detail types of forest resources and what are problems created by deforestations in India ? **07**
- (b)** How is population prediction done? Describe in detail the reasons and results of overpopulation **07**
- Q.5 (a)** Why we are now harvesting rain water? What are problems of water quality in India? **07**
- (b)** What are causes of Environmental Pollution? . List all Environmental Pollution and their sources in detail **07**

- Q.6 (a)** Narrate in detail major sources and pollution produced by uses of nonrenewable energy sources? What are renewable resources which can replace them so that Environmental pollution is reduced **07**
- (b)** Describe types of forest resources and their uses and overuses and effects of that activity of human **07**
- Q.7 (a)** Enlist Global Environmental pollution problems. Describe one in detail and suggest remedial measures to reduce them **07**
- (b)** “Discharging used water in river is not solution of pollution” Explain in detail **07**
