

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE- SEMESTER 1<sup>st</sup> / 2<sup>nd</sup> EXAMINATION (NEW SYLLABUS) – SUMMER - 2017**

**Subject Code: 2110007****Date: 06/06/2017****Subject Name: Environmental Studies****Time: 2:30 PM to 05:00 PM****Total Marks: 70****Instructions:**

1. Question No. 1 is compulsory. Attempt any four out of remaining Six questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

**Q.1 Objective Question (MCQ)****(a) 07**

1. The layer of atmosphere in which ozone is found is  
(a) Stratosphere (b) Troposphere (c) Ionosphere (d) Exosphere
2. The layer in which presence of ozone is treated as pollutant is  
(a) Stratosphere (b) Troposphere (c) Ionosphere (d) Exosphere
3. The least pollutant receptor or sink on the earth is  
(a) Biosphere (b) Atmosphere (c) Lithosphere (d) Hydrosphere
4. Autecology is defined as  
(a) Study of single species (b) Study of communities  
(c) Study of physical environment (d) None of these
5. Autotrophs are defined as  
(a) Those who prepare their own food  
(b) Those who depends on producers for their food  
(c) Can do both things (d) None of these
6. Man comes in the category of  
(a) Décomposer (b) Producer (c) Omnivore (d) Carnivore
7. Number pyramid for a Tree is  
(a) Upright (b) Inverted (c) Both (d) None of these

**(b) 07**

1. Movement of people from own country to other country is called  
(a) Immigration (b) Registration (c) Eradication (d) Emigration
2. Eutrophication is caused in water bodies due to  
(a) Poor nutrients (b) Excess nutrients (c) Poor BOD (d) Excess BOD
3. Examples of conventional energy resources are  
(a) Coal, petrol and natural gas (b) Wind energy  
(c) Solar energy (d) None of these
4. Blue baby disease is caused by  
(a) Sodium (b) Chlorides (c) Fluoride (d) Nitrate
5. Effect of pollution on Taj Mahal is basically due to  
(a) CFCs (b) CO (c) SO<sub>2</sub> (d) None of these
6. Safe drinking water is also called  
(a) Rain water (b) Potable water  
(c) Well water (d) Distilled water
7. Soot particles come in air by  
(a) Photochemical reaction (b) Volcanic eruption  
(c) Acid rain (d) Fuel combustion

**Q.2 (a) Why environmental education is provided to Engineers? 03****(b) How does the development in technology affects the environment 04**

	(c) Give the compositions of all four components of environment	07
<b>Q.3</b>	(a) Define (i) Producers (ii) Consumers (iii) Decomposers	03
	(b) What is ecology? Discuss the objects of Ecology	04
	(c) How ecological balance is maintained in ecosystem? Describe energy flow in ecosystem schematically.	07
<b>Q.4</b>	(a) What are the objects of Environmental protection act 1986.	03
	(b) Differentiate (i) food chain and food web (ii) herbivores and carnivores	04
	(c) What are ecological pyramids? Explain with sketch the pyramid of numbers in forest and pond.	07
<b>Q.5</b>	(a) Draw and discuss oxygen cycle	03
	(b) Discuss (i) Population explosion (ii) Water pollutants	04
	(c) Describe renewable and non- renewable energy resources and give examples of each one.	07
<b>Q.6</b>	(a) Differentiate the role of CPCB and GPCB	03
	(b) How water and forest resources contribute for development and growth of a country?	04
	(c) What are different Greenhouse gases? Discuss the effect of greenhouse gases on environment.	07
<b>Q.7</b>	(a) What do you mean by land degradation	03
	(b) What is dB? Describe the ways to control the noise pollution	04
	(c) Differentiate primary and secondary air pollutants? Explain its effect on plants and animals.	07

\*\*\*\*\*