

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER- 1<sup>st</sup> / 2<sup>nd</sup> EXAMINATION (New Syllabus) – WINTER 2013**

**Subject Code: 2110007**

**Date : 18-12-2013**

**Subject Name: Environmental Studies**

**Time: 10:30 am - 1:00 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**

(a) Select the appropriate answer

**07**

1. The outer soil crust of the earth is known as  
(a) Hydrosphere (b) Exosphere (c) Lithosphere (d) Mesosphere
2. Which ecosystem shows an inverted pyramid of biomass?  
(a) Pond (b) Forest (c) Grassland (d) Desert
3. If the population of a species increases suddenly, it is called  
(a) Population growth (b) Over population (c) Population forecasting (d) Population explosion
4. Chlorofluorocarbon (CFC) used as coolants in refrigerators contains  
(a) Carbon (b) Hydrogen (c) Chlorine and fluorine (d) All of these
5. Which disease occurs due to consumption of methyl mercury by bacterial action.  
(a) Minamata (b) fluoropyrosis (c) cholera (d) None of these
6. Which air pollutant reduces the oxygen carrying capacity of the blood by combining with hemoglobin forming carboxy hemoglobin?  
(a) CO (b) SO<sub>2</sub> (c) CO<sub>2</sub> (d) N<sub>2</sub>O
7. Which of these is not a renewable energy source?  
(a) Tidal energy (b) Wind energy (c) nuclear energy (d) Geo thermal energy

(b) Select the appropriate answer

**07**

1. The lack of sufficient calories in available food so that one has little or no ability to move or work is known as  
(a) Malnutrition (b) Malnourishment (c) Undernourishment (d) All of these
2. In cyclone separators which force is utilized to separate the particulate matter from the gas?  
(a) Electrostatic force (b) Centrifugal force (c) Gravitational force (d) Hydrostatic force
3. The study of interrelationship between living organisms and their physical and biological environment is termed as  
(a) Ecology (b) Ecosystem (c) Environmental Education (d) Environmental Science
4. A green house has higher temperature inside than outside which is due to  
(a) Glass walls (b) High CO<sub>2</sub> content (c) High water vapour of air (d) All of these
5. The programme managed by Forest department of Gujarat for planting trees on non-forest lands to improve green cover of state is  
(a) Social Forestry Programme (b) Social welfare programme (c) Social afforestation (d) Tree plantation programme

6. Which of these is not a physical quality parameter for determining the quality of water  
(a) Turbidity (b) odour (c) Hardness (d) temperature
7. Loss or removal of the superficial layer of soil by the action of water, wind or by the activities of man is termed as  
(a) Soil pollution (b) Desertification (c) Salination (d) Soil erosion
- Q.2** (a) How are food chain and food web interconnected? Explain this with an example of aquatic or terrestrial ecosystem . **07**  
(b) Describe uses and overuses of land and forest. **07**
- Q.3** (a) Discuss the environmental effects of agriculture and limits of food production. **07**  
(b) Discuss various reasons for over population. **07**
- Q.4** (a) Give types and effects of common air pollutants in detail **07**  
(b) Discuss about effects of noise pollution and its control. **07**
- Q.5** (a) Write a note on water quality criteria **07**  
(b) Discuss the environmental implications of non conventional energy sources. **07**
- Q.6** (a) Write explanatory note on Ozone layer Depletion **07**  
(b) Discuss the importance and objectives of environmental ethics. **07**
- Q.7** (a) Explain the objectives and various functions of Gujarat Pollution Control Board. **07**  
(b) Write the importance of environmental education and explain the impact of technology on it. **07**

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