Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- 1^{st} / 2^{nd} 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
- 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_2 (c) CO_2 (d) N_2O
- 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
- 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 Co₂ 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

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- **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
- (a) How are food chain and food web interconnected? Explain this with an example 0.2 07 of aquatic or terrestrial ecosystem. Describe uses and overuses of land and forest. **07 (b) Q.3** (a) Discuss the environmental effects of agriculture and limits of food production. 07 **(b)** Dicuss various reasons for over population. 07 (a) Give types and effects of common air pollutants in detail **07 Q.4** Discuss about effects of noise pollution and its control. 07 (a) Write a note on water quality criteria **07** 0.5 **(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.

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