

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER- 1st / 2nd • EXAMINATION – SUMMER • 2014

Subject Code: 2110007**Date: 17-06-2014****Subject Name: Environmental Studies****Time: 02:30 pm - 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

(a) Choose the most correct answer of the following multiple choice questions. **07**

1. Earth Day is celebrated on _____.
(a) 5th June (b) 12th May (c) 22nd April (d) 22nd May
2. Stratosphere contains an important species which protects life on Earth is _____.
(a) Oxygen (b) Ozone (c) Nitrogen (d) Hydrogen
3. A zone consisting of Land, water and air which supports life is called.
(a) Biosphere (b) Atmosphere (c) Lithosphere (d) Hydrosphere
4. The graphical representation of an organism position as well as function at successive trophic levels called _____.
(a) Food chain (b) Food web (c) Ecological pyramid
(d) Biogeochemical cycle.
5. The Equitable use of resources is necessary for _____.
(a) sustainable development (b) better Life Style for man
(c) Sustain natural wealth (d) All of the above.
6. The average number of persons living per sq. km. is known as _____.
(a) Community (b) Population growth (c) Population
(d) Population density.
7. Any material that can be transformed into more valuable and useful product or service is called _____.
(a) Resource (b) mineral (c) element (d) product.

(b) Choose the most correct answer of the following multiple choice questions. **07**

1. PAN is a secondary pollutant that _____.
(a) Forms when hydrocarbon radical reacts with nitrogen dioxide.
(b) Cause photochemical smog.
(c) May cause respiratory diseases in human.
(d) All of the above.
2. _____ gives an empirical value to water quality and is a parameter for organic matter present in water.
(a) B O D (b) C O D (c) D O (d) All of the above.
3. Which of the following is not a method for water conservation.
(a) Rain water harvesting. (b) Improving irrigation efficiency
(c) Avoiding wastage of water (d) Ground water extraction.

4. Automobile Exhaust consists of _____.
- (a) Hydrocarbons, carbon monoxide and nitric oxide.
 (b) Lead vapour (c) Sulphur dioxide. (d) Carbon dioxide
5. Sunlight may be converted into electricity through _____.
- (a) galvanic cell (b) carbon electrodes (c) photo voltaic cell (d) glass panel
6. The energy flow through the Ecosystem is _____.
- (a) cyclic (b) linear and oneway (c) both cyclic and linear (d) linear and twoway
7. Sex ratio is defined as _____.
- (a) Nos. of female per 1000 male.
 (b) Nos. of female per 100 male.
 (c) Nos. of male per 1000 female
 (d) Nos. of male per 100 female
- Q.2** (a) Define the term Environment and Explain interrelationship between Various components of Environment. **07**
- (b) Give at least four names of government body in Gujarat State Working for environmental protection. Also write the role of NGO's in improving Environment awareness. **07**
- Q.3** (a) What is biogeochemical cycle? Explain carbon cycle with neat sketch. **07**
- (b) Define ecological pyramid. State the types of ecological pyramid and describe the pyramid of energy showing the energy flow. **07**
- Q.4** (a) Differentiate renewable and non renewable natural resources. Also state various measures for conservation of natural resources. **07**
- (b) Enlist various causes and effects of deforestation. Also suggest few possible measures to check deforestation. **07**
- Q.5** (a) What is Urbanization? What are the Environmental problems related to urbanization? How urbanization can be controlled? **07**
- (b) Classify various sources of water pollution. Also write various measures to control it. **07**
- Q.6** (a) Enlist different air pollutant and explain their effects on human beings. **07**
- (b) Write a Short Note on (a) Land degradation (b) Sources and effects of noise pollution. **07**
- Q.7** (a) Discuss "Solar Energy is the Energy for future in India". **07**
- (b) Enlist major global Environmental problems. Also write causes and effects of acid rain. **07**
