

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- 1st / 2nd EXAMINATION (NEW SYLLABUS) – SUMMER 2018

Subject Code: 2110007

Date: 25-05-2108

Subject Name: Environmental Studies

Time: 02:30 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)	Mark
(a)	Choose the most appropriate answer for the following multi choice questions: 1. The range of temperature variation in mesosphere is (a) 20°C to -56°C (b) -2°C to -90°C (c) -56°C to -2°C (d) -90°C to 120°C 2. During photosynthesis, autotrophs take in (a) Oxygen (b) Carbon dioxide (c) Nitrogen (d) Sulphur 3. Which ecosystem shows an inverted pyramid of biomass? (a) Pond (b) Forest (c) Grassland (d) Desert 4. Which one of the following is not a method for water conservation? (a) Rain water harvesting (b) Ground water extraction (c) Improving irrigation efficiency (d) Avoiding water wastage 5. If the population of a species increases suddenly, is known as (a) Population growth (b) over population (c) population explosion (d) population forecasting 6. The death of infants per 1000 births, are known as (a) Birth rate (b) Mortality (c) Infant mortality rate (d) Total fertility rate 7. Which of the following is not physical quality parameter of water? (a) Turbidity (b) Odour (c) Hardness (d) Temperature	07
(b)	Choose the most appropriate answer for the following multi choice questions 1. Bhopal gas tragedy occurred due to leakage of (a) Chlorobenzene (b) Carbon monoxide (c) Methyl Isocyanate (d) Dioxins 2. Which one is not greenhouse gas? (a) CO ₂ (b) Ozone (c) CH ₄ (d) CFC 3. Which one of the following is not a fossil fuel? (a) Natural gas (b) Petrol (c) Coal (d) Uranium 4. Global environmental problems are: (a) Global warming (b) Ozone depletion (c) Acid rain (d) All of above 5. _____ is a greenhouse gas. (a) Nitrogen (b) Oxygen (c) Argon (d) Water vapour 6. Wild life protection act was enacted in (a) 1952 (b) 1955 (c) 1972 (d) 1982 7. The world “Environment Day” is celebrated on (a) 15th June (b) 5th June (c) 5th January (d) 15th February	07

- Q.2** (a) Define: (i) Consumers (ii) Producers (iii) Decomposers **03**
(b) Write in points: Conservation in Environment. **04**
(c) Why environmental education is important? Explain the impact of technology and development on environment. **07**
- Q.3** (a) Define and differentiate Undernourishment and malnourishment. **03**
(b) Explain the various sources of water pollution. **04**
(c) How ecological balance is maintained in ecosystem? Describe energy flow in ecosystem schematically. **07**
- Q.4** (a) Define: (i) Ecology (ii) Saprotrophs (iii) Eutrophication **03**
(b) What the causes of land degradation **04**
(c) Describe the importance of Biogeochemical cycles in biosphere. Explain Nitrogen cycle with the help of a diagram. **07**
- Q.5** (a) Define the term: Global Warming, Soil Erosion and Green House effect. **03**
(b) Explain oxygen cycle with a neat sketch. **04**
(c) Define the term Acid rain. Discuss the various causes and effects of acid rain on the environment. **07**
- Q.6** (a) What are the objects of Environmental protection act 1986. **03**
(b) What are the effects of thermal pollution and detergents on aquatic life? **04**
(c) What do you understand by acceptable noise level? Briefly describe the sources and effects of noise pollution. **07**
- Q.7** (a) Give full form of: GPCB, GEC and GSDMA **03**
(b) Explain Food Web **04**
(c) What are the environmental impacts of a coal based thermal power plant? Suggest suitable solution to the energy problems in view of growing population and industrialization of India. **07**
