

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-I & II (NEW) EXAMINATION – WINTER 2015

Subject Code: 2110007

Date:01/01/2016

Subject Name: Environmental Studies

Time: 10:30am to 01:00pm

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. Stratosphere contains an important species which protects life on earth is
(a)Oxygen (b) Ozone (c) Nitrogen (d) Hydrogen
2. Eutrophication is
(a) An improved water quality status of lakes.
(b) The result of accumulation of plant nutrients in water bodies.
(c) A process in the carbon cycle.
(d) None of the above.
3. Acid rain contains
(a)Sulphuric acid (b) Hydrochloric acid (c)Oxalic acid (d) Acetic acid
4. A set of organisms of the same species occupying a particular space is known as
(a) Population density (b) Population (c) Population crash (d) None of these
5. Bhopal Gas Tragedy was due to leakage of
(a)Methyl iso cynate (MIC) (b) CO (c)Both (d) None of these
6. The Water (Prevention and Control of Pollution),Act was enacted in
(a)1974 (b) 1986 (c) 1966 (d) 1990
7. Fossil Fuels are
(a)Renewable resources (b)Non renewable resources
(c)Both (d)None of these

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

1. Moral principles that try to define our responsibility towards the environment are known as
(a)Environmental ethics (b)Environmental laws(c) Both (d)None of these
2. The scientific study of human population is known as
(a)Biography (b)Demography (c) Geography (d) Seismology
3. Environmental degradation is due to
(a)Rapid industrialization(b)Onset of different developmental works

(c)Fast urbanization leading to deforestation (d)All of the above

4. Chernobyl disaster is related to
(a) Nuclear power plant (b) Coal based power plant
(c) Gas based power plant (d) None of these
5. BOD stands for
(a)Biological Oxygen Demand (b)Basic Oxygen Demand
(c)Biological Oxygen Decomposition (d)Biological Organic Demand
6. Detritus food chain starts from
(a)Dead organic matter (b)Green plants
(c) Both (a) and (b) (d)None of the above
7. Which of the following gases has the maximum contribution to enhanced green house effect
(a)CFCs (b)CH₄ (c) CO₂ (D) N₂O
- Q.2** (a) Write a short note on Environmental Degradation. (3)
(b) Explain the components of environment and their major interactions. (4)
(c) What do you understand by the term Deforestation? Discuss the various causes and effects of Deforestation. (7)
- Q.3** (a) Define Biotic components, Pollutants and Renewable energy resources. (3)
(b) Define and differentiate primary and secondary air pollutants. (4)
(c) What do you understand by the term ecological pyramids? Explain different types of ecological pyramids with their relative advantages and disadvantages.(7)
- Q.4** (a) Define Acid rain, Producer and Desertification. (3)
(b) Write a short note on Pond ecosystem. (4)
(c) What do you understand by the term Over population? Give the reasons for over population and mention problems created by over population. (7)
- Q.5** (a) Define the term Global warming and Soil erosion. (3)
(b) Explain Food web. (4)
(c) Explain the aim and objectives of Air (Prevention & control of pollution), Act 1981. (7)
- Q.6** (a) Define Environment, Food chain and Soil pollution. (3)
(b) Explain the different uses and sources of water. (4)
(c) What do you understand by acceptable noise level? Briefly describe the sources and effects of noise pollution. (7)
- Q.7** (a) Define the term Biomagnification and Total fertility rate. (3)
(b) Write a short note on applications and limitations of solar energy. (4)
(c) What do you understand by the term Biogeochemical cycles? Describe water cycle with the help of a neat sketch in detail. (7)
