

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-1/2 (NEW) EXAMINATION – WINTER 2017

Subject Code: 2110007

Date: 08/01/2018

Subject Name: Environmental Studies

Time: 10:30 AM TO 01:00 PM

Total Marks: 70

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 (a) Choose the most appropriate answer for the following multi choice questions: **07**

1. Short term properties of the atmosphere at a given place and time is referred as

- (a) Climate (b) Microclimate (c) Season (d) Weather

2. Most stable ecosystem is

- (a) Forest (b) Ocean (c) Desert (d) Mountain

3. Autecology is defined as

- (a) The study of abiotic environment
(b) The study of communities
(c) The study of population of single species
(d) The study of living and nonliving environment

4. Out of following sources, which is a renewable source of energy.

- (a) Natural Gas (b) Wind energy (c) Nuclear power
(d) petroleum

5. Which 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

6. The main causes of deforestation are

- (a) Industrial development (b) over grazing and agriculture
(c) Commercial logging (d) All of the above

7. Which of the group of diseases is spread through contaminated food or water?

- (a) Typhoid cholera & dysentery
(b) Tetanus Hepatitis & AIDS
(c) Measles influenza & small pox
(d) Rabies Malaria & encephalitis

(b) Choose the most appropriate answer for the following multi choice question: **07**

1. The deaths of infants per 1000 births, are known as

- (a) Birth rate (b) Mortality (c) Infant mortality rate
(d) Total fertility rate

2. Discharge of organic waste water into river will _____.

- (a) Reduce dissolved oxygen (b) Reduce pH
(c) Increases TDS (d) Toxic to humans

3. Eutrophication is caused due to the nutrients like _____ and _____.
(a) calcium and sodium (b) phosphorous and nitrogen
(c) carbon and oxygen (d) None of the above
4. Which one is not green house gas?
(a) CO₂ (b) Ozone (c) CH₄ (d) CFC
5. Noise is expressed in _____.
(a) Lux (b) db (c) Pascal (d) Joules
6. Which of the following gases has maximum contribution to enhanced green house effect.
(a) CFC'S (b) CH₄ (c) CO₂ (d) N₂O
7. The provisions for environmental protection include _____.
(a) prevention and control of water pollution act
(b) prevention and control of air pollution act
(c) environmental protection act
(d) all of the above

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| Q.2 | (a) Explain the need of sustainable development. | 03 |
| | (b) Explain Forest ecosystem. | 04 |
| | (c) Differentiate renewable and non renewable natural resources. Also state various measures for conservation of natural resources. | 07 |
| Q.3 | (a) Write a short note on overuse of water. | 03 |
| | (b) Explain importance of afforestation. | 04 |
| | (c) Enlist different air pollutants and explain their effects on human being. | 07 |
| Q.4 | (a) Define malnourishment and undernourishment. | 03 |
| | (b) Explain environmental problems due to Urbanization. | 04 |
| | (c) Classify various sources of water pollution. Also write various measures to control it. | 07 |
| Q.5 | (a) Write short note on sources and effects of noise pollution. | 03 |
| | (b) Explain the aim & objectives of Air (Prevention & control of pollution) Act 1981. | 04 |
| | (c) Enlist Global environmental pollution problems. Describe one in detail and suggest remedial measures to reduce them. | 07 |
| Q.6 | (a) Define pollution, pollutants and population explosion. | 03 |
| | (b) Explain the scope of Ecology. | 04 |
| | (c) What is land degradation and what are the causes of land degradation? | 07 |
| Q.7 | (a) Write advantages, disadvantages and application of solar energy. | 03 |
| | (b) What do you understand by environmental ethics and what are its objectives. | 04 |
| | (c) Write short note on Eutrophication. | 07 |
