

# C. U. SHAH UNIVERSITY

## Winter Examination-2020

**Subject Name: Environmental Studies**

**Subject Code: 4TE01ENS1**

**Branch: B.Tech (All)**

**Semester: 1**

**Date: 16/03/2021**

**Time: 03:00 To 06:00**

**Marks: 70**

**Instructions:**

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

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- Q-1 Attempt the following questions: (14)**
- a) Non – renewable resources are 1  
(a) Soil-water (b) Plants and animals (c) Coal, Petroleum (d) Sunlight, air
  - b) Genetic variation between distinct populations of the same species is 1  
known as  
(a) Species diversity (b) Ecosystem diversity  
(c) Genetic diversity (d) Biodiversity
  - c) The least pollutant receptor or sink on the earth is 1  
(a) Hydrosphere (b) Atmosphere (c) Lithosphere (d) None of these
  - d) Normal average thickness of stratospheric ozone layer across the globe is 1  
around  
(a) 200 DU (b) 300 DU (c) 400 DU (d) 500 DU
  - e) The universal declaration of human rights was proclaimed by the UN in 1  
the year  
(a) 1946 (b) 1947 (c) 1948 (d) 1949
  - f) The average life expectancy around the world is currently 1  
(a) Decreasing (b) Increasing (c) Not changing (d) Stabilizing
  - g) Major compound responsible for the destruction of stratospheric ozone 1  
layer is  
(a) Oxygen (b) Centimeters (c) Decibels (d) Dobson Units
  - h) The disease which wiped out one third of the population of Europe in the 1  
12<sup>th</sup> and 13<sup>th</sup> centuries was  
(a) Cholera (b) Plague (c) Meningitis (d) Diphtheria
  - i) Most stable ecosystem is 1  
(a) Forest (b) Desert (c) Ocean (d) Mountain
  - j) The main pathogen present in contaminated water is 1  
(a) Bacteria (b) Algae (c) Protozoa (d) All of the above
  - k) Out of total water on the earth surface fresh water is about 1  
(a) 97% (b) 23% (c) 3% (d) 1%
  - l) The shape of the pyramid of biomass for a pond or any ecosystem is 1  
(a) Inverted (b) Up right (c) Linear (d) Non certain



- m) Which of the following is a biodiversity hot spot in India? 1  
 (a) Gulf of Mannar (b) Western ghat (c) Pachmarhi (d) Sunderbans
- n) Water is acidic if its pH is 1  
 (a) 7 (b) Greater than 7 (c) Less than 7 (d) None of these

**Attempt any four questions from Q-2 to Q-8**

- Q-2 Attempt all questions (14)**  
 A Explain the effect of timber extraction, mining and dam on the forest. 7  
 B Give a brief account of biogeographically classification of India. 7
- Q-3 Attempt all questions (14)**  
 A What is energy and energy resources? Write in brief about different energy resources. 7  
 B How do you justify India as a mega-diversity nation? Explain. 7
- Q-4 Attempt all questions (14)**  
 A Explain terms food chain and food web with example of aquatic and terrestrial ecosystem. 7  
 B Narrate the Bhopal gas tragedy. 7
- Q-5 Attempt all questions (14)**  
 A Write the effects of pollution on the Ganga river. Mention the initiatives taken by present Government to overcome it. 7  
 B What is biome? Enlist different types of biome and explain any two. 7
- Q-6 Attempt all questions (14)**  
 A Explain the steps for solid waste disposal. Mention the treatment stages of solid waste. 7  
 B Write short notes on the following problems of modern agriculture. 7  
 (a) Fertilizers (b) Pesticides
- Q-7 Attempt all questions (14)**  
 A What is biogeochemical cycle? Explain hydrological cycle with neat sketch. 7  
 B What is nuclear pollution? Discuss the controlling measures of nuclear pollution. 7
- Q-8 Attempt all questions (14)**  
 A Give the greenhouse gases and its effect on environment. 7  
 B What is global warming? What are the impacts of global warming? 7  
 Which are the measures to reduce global warming?

