GUJARAT NATIONAL LAW UNIVERSITY GANDHINAGAR Course: Environmental Science Semester- I (Batch: 2020-25)

End Semester Online Examination: February 2021

Date: 12 th February, 2021
Duration: 8 hours
Instructions:

Max. Marks: 40

• The respective marks for each question are indicated in-line.

- Indicate correct question numbers in front of the answer.
- No questions or clarification can be sought during the exam period, answer as it is, giving reason, if any.
- Prescribed Word Limit: 7 Marks: 700-750 words, 6 Marks: 600-650 words, 4 Marks: 400-500 words, 3 Marks: 300-400 words.

Marks (4)

- Q.1 The earth has a blanket of atmosphere, comprising of different types of gases, which not only protects it from collision with other bodies present in the space but also acts as one of the largest sources providing the required support for sustenance of life through turnover of substances whereby the chemical substance moves through biotic and abiotic compartments of the earth. Explain how the largest constituent gas of the atmosphere contributes to the mentioned latter role, with the help of a neat diagram.
- Q.2 India plans to undertake research to utilize the genetic resources available within its (4) territory not only for its benefit but the world at large. In this regard, the Government even plans to let its biodiversity being explored by the private companies not only within its own territory but other countries too. To undertake the process in the best possible manner safeguarding the interest of the country, the Government wants you to place a report on the existing mechanism of dividing the regions within the country under various categories so as to ensure protection of the biological diversity of the region with a specific focus on the fauna and the laws relating to these regions.
- Q.3 The environment has been one of the focal areas in the countries across the Globe $(3x^2 =$ especially after the changes observed in the climate. 6)
 - a) Explain the various roles that is being played by the Organizations that are basically not associated with the Government, but are self-motivated groups, in the protection of the environment in India.
 - b) Explain the various ways in which the Environmental Impact Assessment can be used to safeguard the environment.
- Q.4 The Company "X" plans to acquire land to set-up a new factory and intending to make (3x2= that campus a green campus, plans to undertake several measures. Accordingly, the 6) company requires the following information to be placed by you for appropriate planning at its end:

- a) Explain the various types of focused concentrating solar collectors with the help of neat diagrams.
- b) In order to set-up the factory and harness the solar energy, deforestation may have to be undertaken. Explain the consequences of deforestation.
- Q.5 Explain with scientific reasons why India is so sensitive to all kinds of natural disasters, (7) in the very plausible event that such calamities do arise? Explain the preparedness of our country is in managing natural disasters and what is India's Disaster management setup?
- Q.6 The major problem on the pollution control front is the monitoring of a large number of (7) industrial units spread over different areas of the city of Ahmedabad and its outskirts. Justify that environmental audit is a crucial part of the environmental impact assessment. Suggest the steps to be taken by a company for an environmental audit?
- Q.7 What all needs to be measured to describe the climate change and to document climate (6) variations?
