

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER– I & II (NEW) EXAMINATION – WINTER 2019****Subject Code: 3110007****Date: 16/01/2020****Subject Name: Environmental Sciences****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

|            |  | <b>Marks</b> |
|------------|--|--------------|
| <b>Q.1</b> | (a) Enlist various types of environmental pollutions.                                | <b>03</b>    |
|            | (b) List scope & principles of environmental sciences & explain any one in detail.   | <b>04</b>    |
|            | (c) Explain the role of various engineering disciplines in environmental protection. | <b>07</b>    |
| <b>Q.2</b> | (a) Explain the effects of turbidity on drinking water quality.                      | <b>03</b>    |
|            | (b) Give the classification of water pollutants.                                     | <b>04</b>    |
|            | (c) Write a short note on Global warming.  | <b>07</b>    |
|            | <b>OR</b>  |              |
|            | (c) Write a short note on Acid rain.   | <b>07</b>    |
| <b>Q.3</b> | (a) Explain the benefits of Green building.  | <b>03</b>    |
|            | (b) Give the classification of Air Pollutants.                                       | <b>04</b>    |
|            | (c) Explain the effects of any two air pollutants on human health & properties.      | <b>07</b>    |
|            | <b>OR</b>  |              |
| <b>Q.3</b> | (a) Name the organizations involved in Green building rating system.                 | <b>03</b>    |
|            | (b) What is E – waste? Enlist sources of E – waste.                                  | <b>04</b>    |
|            | (c) Difference between Sound & Noise. Discuss sources & effects of Noise pollution.  | <b>07</b>    |
| <b>Q.4</b> | (a) Explain examples of paper recycle & reuse.                                       | <b>03</b>    |
|            | (b) Define sustainable development.  | <b>04</b>    |
|            | (c) Enlist & Explain the factors affecting municipal solid waste generation.         | <b>07</b>    |
|            | <b>OR</b>  |              |
| <b>Q.4</b> | (a) Explain examples of plastic recycle & reuse.                                     | <b>03</b>    |
|            | (b) Enlist the mitigation measures for climate change.                               | <b>04</b>    |
|            | (c) Explain need of 4R concept for waste minimization.                               | <b>07</b>    |
| <b>Q.5</b> | (a) What do you understand by carbon footprint?                                      | <b>03</b>    |
|            | (b) Distinguish between primary & Secondary carbon footprint.                        | <b>04</b>    |
|            | (c) Write a brief note on concept of Green Building.                                 | <b>07</b>    |
|            | <b>OR</b>  |              |
| <b>Q.5</b> | (a) Explain Clean Development Mechanism (CDM)  | <b>03</b>    |
|            | (b) Explain the effects of Ozone depletion on Human health & plants.                 | <b>04</b>    |
|            | (c) Write a brief note on concept of Smart City.                                     | <b>07</b>    |

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