

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV(NEW) EXAMINATION – WINTER 2022****Subject Code:3141308****Date:13-12-2022****Subject Name:Environmental Resource management****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.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

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|------------|---|-----------|
| Q.1 | (a) Define the terms: 1. Afforestation 2. Deforestation 3. Reforestation | 03 |
| | (b) Explain the concept of environmental carrying capacity. | 04 |
| | (c) What are the causes of desertification? Also highlight consequences due to desertification. | 07 |
| Q.2 | (a) Suggest few steps for water conservation in industry, home & agricultural. | 03 |
| | (b) State and explain the classification of different energy resources. | 04 |
| | (c) Give the difference between Malthusian theory & Optimum population theory. | 07 |
| | OR | |
| | (c) Enlist Green House Gases (GHGs) & explain sources responsible for emission of each GHG gas. | 07 |
| Q.3 | (a) Define “Social Forestry” & explain objective of social forestry. | 03 |
| | (b) Give difference between Renewable and Non-renewable energy resources. | 04 |
| | (c) “Population is route cause of pollution”, justify the statement | 07 |
| | OR | |
| Q.3 | (a) Define carbon foot print & write down types of carbon foot print. | 03 |
| | (b) Compare hydro power & solar energy as alternative energy resource. | 04 |
| | (c) Write a short note on Global Warming. | 07 |
| Q.4 | (a) Draw a neat sketch of “Green House Effect Concept”. | 03 |
| | (b) Define and explain consumptive & non consumptive uses of water. | 04 |
| | (c) Define CDM & explain its goals with suitable examples. | 07 |
| | OR | |
| Q.4 | (a) Justify the statement “Sun as main energy source”. | 03 |
| | (b) Enlist steps for biodiversity conservation & explain any one step in detail. | 04 |
| | (c) Enlist & explain the reasons for declination of Biodiversity. | 07 |
| Q.5 | (a) Define ‘Ethics’ and relate its application to environment. | 03 |
| | (b) Explain how the forests act as “air – purifiers” and as “carbon storage tanks” | 04 |
| | (c) Enlist and explain merits & demerits of pesticides for protection of crop and food. | 07 |
| | OR | |
| Q.5 | (a) Write down the International steps taken for Climate change. | 03 |
| | (b) Write down difference between Weather & Climate. | 04 |

- (c) Enlist and explain the parameters for standard of living and quality of life. **07**
