

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-IV (NEW) EXAMINATION – SUMMER 2022****Subject Code:3141308****Date:23-06-2022****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
<b>Q.1</b>	(a) Define: (i) Resource (ii) Desertification (iii) Deforestation.	<b>03</b>
	(b) Write down the application of solar energy.	<b>04</b>
	(c) Give the comparison between renewable and non-renewable resources.	<b>07</b>
<b>Q.2</b>	(a) Enlist and explain the various forms of energy.	<b>03</b>
	(b) Write a short note on nuclear fission – A chain reaction.	<b>04</b>
	(c) Write the unique characteristics of water and explain any three with example.	<b>07</b>
	<b>OR</b>	
	(c) Write a short note on “Ex-situ Bio-diversity conservation.”	<b>07</b>
<b>Q.3</b>	(a) Give the classification of natural resources.	<b>03</b>
	(b) Write a short note on types of water uses.	<b>04</b>
	(c) Identify sources of food and enlist the limits to food production.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Define: (i) CDM (ii) GNP (iii) Sustainable development.	<b>03</b>
	(b) Explain the advantages and disadvantages of hydropower.	<b>04</b>
	(c) Describe the environmental effects of deforestation.	<b>07</b>
<b>Q.4</b>	(a) Write down the application of exponential growth equation.	<b>03</b>
	(b) Explain the concept and application of doubling time.	<b>04</b>
	(c) Explain Malthusian theory of maximum population with the help of neat sketch.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Describe the growth rate equation.	<b>03</b>
	(b) Write down the environmental consequences of population explosion.	<b>04</b>
	(c) Enlist various population forecasting methods & explain incremental increase method in detail.	<b>07</b>
<b>Q.5</b>	(a) Discuss the rain water harvesting.	<b>03</b>
	(b) Write the parameters for Standards of Living and Quality of life.	<b>04</b>
	(c) Write a short note on carbon footprint.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Differentiate between ‘Reuse’ and ‘Recycle’ of water with examples.	<b>03</b>
	(b) Explain role of CDM in environmental issues.	<b>04</b>
	(c) Explain the concept of sustainable development.	<b>07</b>

\*\*\*\*\*