

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER– IV(NEW) EXAMINATION – SUMMER 2023****Subject Code:3144006****Date:17-07-2023****Subject Name:Environmental Sustainability****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) What is carbon tax?	<b>03</b>
	(b) Differentiate environment and ecosystem.	<b>04</b>
	(c) Explain how the renewable resources are used for the better environment.	<b>07</b>
<b>Q.2</b>	(a) What is health ecosystem?	<b>03</b>
	(b) How excess pollution is avoided?	<b>04</b>
	(c) Explain the concepts of cleaner technologies.	<b>07</b>
<b>OR</b>		
	(c) Explain the role of government policies in the development of sustainability.	<b>07</b>
<b>Q.3</b>	(a) What is CEPI index?	<b>03</b>
	(b) What are the types of pollutants?	<b>04</b>
	(c) Why it is important to protect the food supply chain?	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Enlist the pillars of sustainable developments?	<b>03</b>
	(b) What are the ways of sustainable living?	<b>04</b>
	(c) Explain: the effects of different types of pollutants?	<b>07</b>
<b>Q.4</b>	(a) What is semi renewable resource of energy?	<b>03</b>
	(b) Explain with sketch: the tidal energy.	<b>04</b>
	(c) Define Global warming and the reasons of its happening. Describe the major impacts of Global Warming.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) Give the good housekeeping checklist.	<b>03</b>
	(b) Explain with sketch: the geo thermal energy.	<b>04</b>
	(c) What is Carbon footprint? How to reduce it?	<b>07</b>
<b>Q.5</b>	(a) Differentiate renewable and non-renewable resources of energy.	<b>03</b>
	(b) Explain different principles of sustainable development.	<b>04</b>
	(c) What are the guidelines of APO on green productivity?	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) What is socio-ecological process?	<b>03</b>
	(b) Explain different principles of green chemistry.	<b>04</b>
	(c) Why cleaner production in better?	<b>07</b>

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