

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) EXAMINATION – WINTER 2023****Subject Code:3144006****Date: 06-02-2024****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
Q.1	(a) Enlist the pillars of sustainable developments?	03
	(b) What are the classifications of ecosystem?	04
	(c) Describe the socio-ecological aspect of sustainable development.	07
Q.2	(a) Give classifications of air pollutants?	03
	(b) Discuss difference between environment and ecosystem.	04
	(c) Discuss the principles of green chemistry.	07
OR		
	(c) Describe health of ecosystem and its indicators.	07
Q.3	(a) State any three advantages of using solar energy.	03
	(b) How is geothermal energy used to produce electricity?	04
	(c) Discuss sources and effects for water pollution.	07
OR		
Q.3	(a) Define renewable and non renewable resources.	03
	(b) What are the effects of air pollution?	04
	(c) Explain wind energy with its advantages.	07
Q.4	(a) Explain the concept of Cleaner Production.	03
	(b) Discuss the ways to reduce excessive pollution.	04
	(c) Write guidelines of APO on Green Productivity.	07
OR		
Q.4	(a) What is Good housekeeping?	03
	(b) Discuss the benefits of Cleaner Production.	04
	(c) Explain the techniques of green productivity.	07
Q.5	(a) What is green productivity?	03
	(b) What is carbon tax? Why should it be implemented?	04
	(c) What is CEPI? How CEPI score is calculated?	07
OR		
Q.5	(a) Which are the different carbon sources?	03
	(b) Discuss Government Subsidies to promote environmental sustainability.	04
	(c) What is environmental sustainability? How can it be achieved?	07
