

GUJARAT TECHNOLOGICAL UNIVERSITY

BHMCT- SEMESTER-I EXAMINATION – WINTER 2024

Subject Code: BH01000061

Date: 18-01-2025

Subject Name: Fundamentals of ESG for 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.

- Q.1** (a) What are the key components of an ecosystem? **03**
(b) How do ecosystems maintain balance? **04**
(c) How does the water cycle contribute to ecosystem functioning? **07**
- Q.2** (a) What are the primary causes of air pollution? **03**
(b) Define environmental pollution and its major types. **04**
(c) Explain the greenhouse effect and its significance to global climate. **07**
- OR**
- (c) How does overfishing affect marine ecosystems? **07**
- Q.3** (a) Define sustainability in the context of business. **03**
(b) What are the economic benefits of sustainable business practices? **04**
(c) Why is it critical to achieve the 17 SDGs? **07**
- OR**
- Q.3** (a) Explain how SDG Goal 1 (No Poverty) relates to ESG. **03**
(b) What is the ESG framework, and why is it important? **04**
(c) What is the role of investors in promoting ESG? **07**
- Q.4** (a) How does ESG impact a company's reputation? **03**
(b) Discuss the role of technology in enhancing ESG practices. **04**
(c) Explain how innovation contributes to sustainable business development. **07**
- OR**
- Q.4** (a) What are the main causes of desertification? **03**
(b) How do carbon credits work in promoting sustainability? **04**
(c) What are the major threats to global ecosystems? **07**
- Q.5** (a) What is an ecological footprint, and how does it impact sustainability? **03**
(b) What are the primary pollutants that cause land degradation? **04**
(c) Discuss the concept of acid rain and its impact on ecosystems. **07**
- OR**
- Q.5** (a) What are Sustainable Development Goals (SDGs)? **03**
(b) What are the main challenges in achieving SDGs globally? **04**
(c) What are the key principles of corporate social responsibility (CSR) in relation to sustainability? **07**
