

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S3 (R) (FT/WP) Examination November 2025 (2024 Scheme).

Course Code: UCHUT347**Course Name: ENGINEERING ETHICS AND SUSTAINABLE DEVELOPMENT**

Max. Marks: 50

Duration: 2 hours 30 minutes

PART A*(Answer all questions. Each question carries 3 marks)*

		CO	Marks
1	Plagiarism is an ethical concern in engineering. Explain	CO1	(3)
2	What is gender spectrum? Give examples of gender identities on the spectrum.	CO2	(3)
3	What is Sustainable engineering? Explain the three key dimensions.	CO3	(3)
4	Define Bio diversity and explain the human impact on Biodiversity loss.	CO3	(3)
5	Differentiate between Linear Economy and Circular Economy.	CO4	(3)
6	What is the impact of climate change on natural and human systems	CO5	(3)

PART B*(Answer any one full question from each module, each question carries 8 marks)***Module -1**

7	Explain the difference between personal and professional ethics.	CO1	(8)
8	a) Explain the term “gendered technology” with suitable examples.	CO2	(5)
	b) With the help of suitable examples, explain the major contributions made by women in the field of Science and Technology.	CO2	(3)

Module -2

- 9 a) What is Environmental Ethics? Explain the key philosophical theories in Environmental Ethics. CO3 (8)
- 10 a) Discuss the core elements of sustainable urban planning and green infrastructure? CO3 (5)
- b) Define ecosystem. Mention any two ecosystems in Kerala? CO3 (3)

Module -3

- 11 a) Devise a comprehensive waste management plan to transform your campus towards zero waste. CO4 (8)
- 12 a) What are the impacts of modern transportation systems on environment and society? Can you suggest any urban mobility solutions? CO4 (8)

Module -4

- 13 a) Explain the major environmental policies, regulations and agreements that operate at national and international levels to promote sustainable engineering. CO5 (4)
- b) What are the three renewable energy sources? Discuss how renewable energy technologies can be scaled up in Kerala. CO5 (4)
- 14 a) Discuss how an engineer can make cities and communities more climate-friendly? CO5 (4)
- b) What are the emerging trends and future directions in environmental ethics and sustainability? CO5 (4)
