

NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA
TERM END THEORY EXAMINATION

Question Paper

Month and year of examination: Dec. 2023

Semester: I

Subject: Energy and Environmental Science

Maximum marks: 50

Number of questions to be attempted: 05

Programme: B. Tech. 1st Year

Course code: CHIC-101

Time allowed: 03 hours

Total no. of questions: 05

Note: Candidates, before starting to write the solutions, should please check the Question Paper for any discrepancy and also ensure that they have been delivered the Question Paper of right course no. and right subject title.

All questions carry equal marks.

Q. No.	Description	Marks
✓ 1	A. Why is Biodiversity important? Write various levels of biodiversity.	5
	B. Can we rely exclusively on nuclear energy for driving energy for all applications? Support your answer with proper justification. Or What is nuclear energy? Write advantages and disadvantages of nuclear energy.	5
✓ 2	A. Explain photovoltaic solar cells and comment on its advantages & disadvantages Or A. Write a note on mineral resources. Also explain environmental issues associated with extracting and using mineral resources.	5
	B. Explain the importance of Forests (any five) and effects of Timber extraction (any five).	5
✓ 3	A. Write a note on: Green-house effect	5
	B. What is acid rain? Explain its impacts on human communities and agriculture.	5
✓ 4	A. Write short notes on: a) Particulate matter b) Methyl Isocyanate c) Bad ozone d) Point source pollution e) Reverse osmosis Or Write a brief note on causes, effects and control measures of solid waste management.	5
	B. Explain the importance of water conservation and describe rain water harvesting.	5
✓ 5	A. Match most appropriate radioisotope(s) uses in pathological diagnosis for thyroid, lungs, liver, intestinal scanning and cancer treatment. (Isotopes selection list: Xe-133, Au-198, Tc-99, I-131, Y-90) Or A. Explain the objectives and importance of Air (Prevention and Control of Pollution) Act. What can an individual do to support the Act?	5
	B. Write a case study on watershed management from any one of the following: a) Pani Panchayat Pune, Maharashtra b) Mewar, Rajasthan	5