JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2026

B.Tech-I Semester (BCA)

COURSE CODE (CREDITS): 25B11GE111 (2-0-0) MAX. MARKS: 15

COURSE NAME: ENVIRONMENTAL SCIENCE

COURSE INSTRUCTOR: DR Tyson MAX. TIME: 1 Hour

Note: *(a) All questions are compulsory.*

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculator is not allowed

Q.No	Question	CO	Marks
Q1	Environmental issues involve interactions between living organisms, chemical processes, and human activities. In this context, how does the multidisciplinary nature of Environmental Studies help in understanding and addressing environmental problems? Briefly indicate the contributions of biology, chemistry, and social sciences.	I	3
Q2	The stability of an ecosystem depends on the transfer of matter and energy among its different trophic levels. Discuss the role of food chains, food webs, and energy flow in the functioning of an ecosystem.	II	3
Q3	The circulation of essential elements between biotic and abiotic components maintains the balance of an ecosystem. What are biogeochemical cycles? Using the nitrogen cycle as an example, outline the major processes involved in its circulation.	I	4
Q4	Biodiversity encompasses the variety of life at different levels and is conserved through various approaches. **(a)** Identify and briefly explain the different levels of biodiversity. **(b)** How does in-situ conservation help in protecting biodiversity? Differentiate between a biosphere reserve, wildlife sanctuary, and national park on the basis of their objectives and degree of protection.	III	2+3