USN										Course Code	2	1	C	V	5	5	4

Fifth Semester B.E. Degree Examinations, September / October 2024
ECOLOGY AND ENVIRONMENT

Duration: 3 hrs   **Max. Marks: 100**

*Note: 1. Answer any **FIVE** full questions choosing ONE full Question from each Module.*
2. Missing data, if any, may be suitably assumed.

Q. No		Question	Marks	(RBTL:CO:PI)
		Module-1		
1.	a.	Define the term ecosystem. Explain the structures and functions of ecosystem.	10	(1:1:1:6.1)
	b.	With a neat sketch, explain the energy flow in ecosystem.	10	(1:1:1:6.1)
		(OR)		
2.	a.	With a neat sketch, explain the pyramid of biomass with example.	10	(1:1:1:6.1)
	b.	With a neat sketch, explain carbon and nitrogen cycle.	10	(1:1:1:6.1)
		Module-2		
3.	a.	With a neat sketch, explain aquatic and terrestrial ecosystem.	10	(1:2:1:6.1)
	b.	List and explain the measures to control the eutrophication of lake ecosystem.	10	(1:2:1:6.1)
		(OR)		
4.	a.	With a neat sketch, explain the eutrophication of lake ecosystem.	10	(1:2:1:6.1)
	b.	Differentiate between aquatic ecosystem and terrestrial ecosystem.	10	(1:2:1:6.1)
		Module-3		
5.	a.	Explain the concept of systems ecology and its significance in understanding ecosystems.	10	(1:3:1:6.1)
	b.	Discuss the importance of biodiversity from an ecological perspective, highlighting its role in ecosystem functioning.	10	(1:3:1:6.1)
		(OR)		
6.	a.	What is ecosystem modeling? What are the different types of ecosystem models?	10	(1:3:1:6.1)
	b.	Discuss four significant threats to biodiversity and ecosystems caused by human activities.	10	(1:3:1:6.1)
		Module-4		
7.	a.	Explain the sources and effects of water pollution on aquatic ecosystems and human health.	10	(1:4:1:6.1)

Note: (RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI– Performance Indicator)

	b.	Discuss the major causes of land pollution. How does improper waste disposal contribute to land degradation?	**10**	(1:4:1:6.1)

(OR)

8.	**a.**	What is global warming? What are the main causes of global warming?	**10**	(1:4:1:6.1)
	b.	What is the ozone layer? What causes ozone layer depletion?	**10**	(1:4:1:6.1)

Module-5

9.	**a.**	Explain the guiding principles of environmental education in India.	**10**	(1:5:1:6.1)
	b.	List and explain the objectives of environmental education in India.	**10**	(1:5:1:6.1)

(OR)

10	**a.**	List the goals/ aims of environmental education as per UNSECO.	**10**	(1:5:1:6.1)
	b.	What are some prominent environmental education programs/initiatives in India aimed at raising awareness about biodiversity conservation?	**10**	(1:5:1:6.1)

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Note: (RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI– Performance Indicator)