

Code: 20CE2601A

**III B.Tech - II Semester – Regular / Supplementary Examinations  
APRIL 2024**

**ECOLOGY AND ENVIRONMENT  
(Common to All Branches)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.  
2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
<b>UNIT-I</b>					
1	a)	Define positive & negative ecological interaction with examples. Illustrate how climate change can disrupt ecological interactions.	L3	CO1	7 M
	b)	Why is the study of natural selection and evolution significant in the study of ecology? Prepare the steps involved in natural selection.	L3	CO2	7 M
<b>OR</b>					
2	a)	Differentiate between Ecosystem & Biosphere.	L2	CO1	7 M
	b)	Define carrying capacity of ecosystem. Illustrate how the anthropogenic activities affect carrying capacity of ecosystem with example?	L3	CO2	7 M

<b>UNIT-II</b>					
3	a)	Discuss the role of remote sensing and GIS in Integrated Water Resource Management.	L2	CO2	7 M
	b)	Explain in detail the latest technologies that can be used for soil conservation.	L3	CO2	7 M
<b>OR</b>					
4	a)	Mention the major conflicts in the development of water resources in India.	L3	CO2	7 M
	b)	Prepare the main types and causes of soil erosion in India? How does it affect the environment & the economy of India?	L3	CO2	7 M
<b>UNIT-III</b>					
5	a)	Write a note on the Composition of Earth's atmosphere.	L3	CO3	7 M
	b)	Demonstrate the scales used in meteorology and how they are used?	L3	CO3	7 M
<b>OR</b>					
6	a)	What is the importance of the lithosphere and explain its layers in detail?	L2	CO3	7 M
	b)	Explain the applications of computers in Environmental Geosciences.	L3	CO3	7 M
<b>UNIT-IV</b>					
7	a)	Why is the Environment Protection Act of 1986 called as Umbrella Act? Layout the objectives of the Environmental Protection Act of 1986.	L4	CO4	7 M

	b)	How does environmental education contribute to addressing environmental issues?	L3	CO4	7 M
<b>OR</b>					
8	a)	Prioritize on environmental movements in India.	L4	CO4	7 M
	b)	Illustrate the different ways to promote environmental awareness.	L3	CO4	7 M
<b>UNIT-V</b>					
9	a)	Describe the various stages involved in undertaking Environmental Impact Analysis.	L2	CO4	7 M
	b)	Write a note on Clean Development technologies and their achievements	L3	CO5	7 M
<b>OR</b>					
10	a)	<i>Azadirachta indica</i> as a Bio-monitor for Environmental Pollution. Explain.	L3	CO5	7 M
	b)	Identify the role of organic farming in mitigating climate change.	L2	CO5	7 M