

Reg. No.																				
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code	12773
---------------------	-------

**B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2024**

Second Semester

**Civil Engineering**

(Common to All Branches)

**20BSCY201 - ENVIRONMENTAL SCIENCE AND ENGINEERING**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

	Marks	K- Level	CO
1. Differentiate between food chain and food web.	2	K2	CO1
2. List the hotspots of biodiversity in India.	2	K1	CO1
3. State thermal pollution.	2	K1	CO2
4. Indicate the causes of the earthquake.	2	K2	CO2
5. Define desertification.	2	K1	CO3
6. Identify the ecological benefits of forest.	2	K2	CO3
7. Define the term Environmental Ethics.	2	K1	CO4
8. Relate resettlement and rehabilitation.	2	K2	CO4
9. Illustrate NIMBY syndrome.	2	K2	CO5
10. Define sustainable development.	2	K1	CO5

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) Describe the structure and functional components of an ecosystem.	13	K2	CO1
<b>OR</b>			
b) Explain in-situ and ex-situ conservation of biodiversity along with their merits and limitations.	13	K2	CO1
12. a) Explain the causes, effects and control measures of air pollution.	13	K2	CO2
<b>OR</b>			
b) Illustrate the various natural calamities and explain any one in detail.	13	K2	CO2
13. a) State deforestation. Explain the various causes and consequences of deforestation.	13	K2	CO3
<b>OR</b>			
b) Explain the role of an individual in the conservation of natural resources.	13	K2	CO3

*K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create*

**12773**

14. a) Discuss the causes and effects of global warming. 13 K2 CO4

**OR**

b) Illustrate the causes and effects of Acid rain. 13 K2 CO4

15. a) State AIDS. Discuss briefly on the modes of transmission of HIV and how it can be prevented. 13 K2 CO5

**OR**

b) i) Define sustainable development. Explain the measures to attain sustainability. 7 K2 CO5

ii) Illustrate the causes and characteristics of population growth. 6 K2 CO5

**PART - C (1 × 15 = 15 Marks)**

16. a) Demonstrate the method of Rainwater harvesting and Watershed management. 15 K2 CO4

**OR**

b) i) Define value education. Discuss the concept of value education with the help of suitable examples. 8 K2 CO5

ii) Illustrate the population variation among nations based on age. 7 K2 CO5