

Reg. No.

Question Paper Code

12135

11 AUG 2023

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2023

Second Semester

**Computer Science and Engineering**

(Common to Electrical and Electronics Engineering, Electronics and Instrumentation Engineering, Instrumentation and Control Engineering, Information Technology, Mechanical Engineering, Mechanical and Automation Engineering, Artificial Intelligence and Data Science & M.Tech. – Computer Science and Engineering)

**20BSCY201 - ENVIRONMENTAL SCIENCE AND ENGINEERING**

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

- |  | <i>Marks,<br/>K-Level, CO</i> |
|--|-------------------------------|
| 1. Define Food chain and Food web.                           | 2,K1,CO1                      |
| 2. Mention the hotspots of biodiversity in India.            | 2,K1,CO1                      |
| 3. What are point and non- point sources in water pollution? | 2,K2,CO2                      |
| 4. Indicate the causes of the earthquake.                    | 2,K2,CO2                      |
| 5. Write the ecological uses of forests.                     | 2,K1,CO3                      |
| 6. What is biomass energy?                                   | 2,K1,CO3                      |
| 7. Indicate the objectives of the air act?                   | 2,K2,CO4                      |
| 8. What is meant by Environmental Ethics?                    | 2,K1,CO4                      |
| 9. Identify the importance of value education.               | 2,K2,CO5                      |
| 10. List the various women and child welfare programmes.     | 2,K1,CO5                      |

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) What is meant by ecological succession? Explain the stages, types and process of ecological succession. 13,K2,CO1
- OR**
- b) Explain in-situ and ex-situ conservation of biodiversity along with their merits and limitations. 13,K2,CO1
12. a) Explain in detail the role of an individual in pollution prevention. 13,K2,CO2
- OR**
- b) Explain the methods of separation of components of solid waste and its management. 13,K2,CO2

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

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13. a) Discuss the problems of fertilizers and pesticides in modern agriculture. *13,K2,CO3*

**OR**

b) What is deforestation? What are the various causes of deforestation? Discuss its consequences. *13,K2,CO3*

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

**OR**

b) Discuss 12 principles of Green Chemistry. *13,K2,CO4*

15. a) What is AIDS? Discuss briefly on the modes of transmission of HIV and how it can be prevented. *13,K2,CO5*

**OR**

b) Discuss the 17 sustainable Development goals. *13,K2,CO5*

**PART - C (1 × 15 = 15 Marks)**

16. a) Describe the method of Rainwater harvesting and watershed management to conserve water. *15,K2,CO4*

**OR**

b) Explain the role of information technology in the environment and human health protection. *15,K2,CO5*