Reg. No.						
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Question Paper Code 12522

### B.E. / B.Tech. / M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023

Second Semester

## **Computer Science and Engineering**

(Common to ALL Branches)

## 20BSCY201- ENVIRONMENTAL SCIENCE AND ENGINEERING

(Regulations 2020)

Duration: 3 Hours Max. Marks: 100

### PART - A $(10 \times 2 = 20 \text{ Marks})$

**Answer ALL Questions** 

1.	Define ecological succession.	Marks, K-Level, CO 2,K1,CO1
2.	List the hotspots of biodiversity in India.	2,K1,CO1
3.	Explain point and non-point sources of water pollution.	2,K2,CO2
4.	What is meant by thermal pollution?	2,K1,CO2
5.	Interpret the environmental effects of extracting and using mineral	2,K2,CO3
	resources.	
6.	What is blue baby syndrome?	2,K1,CO3
7.	What do you understand about global warming?	2,K1,CO4
8.	What is photochemical smog?	2,K1,CO4
9.	Discuss the doubling time with reference to annual population growth.	2,K2,CO5
10.	Define population explosion.	2,K2,CO5

# $PART - B (5 \times 13 = 65 Marks)$

**Answer ALL Questions** 

11. a) Write short note on

(i) Food chain and food web	6,K2,CO1
(ii) Ecological pyramid	7,K2,CO1

#### OR

- b) Explain in detail about in-situ and ex-situ conservation of <sup>13,K2,CO1</sup> biodiversity.
- 12. a) Compute the major sources, effects and control measures of water 13,K3,CO2 pollution.

OR

- b) Illustrate the role of an individual in prevention of environmental 13,K3,CO2 pollution. Why such an effort at individual level is important?
- 13. a) Summarize the term "modern agriculture". Compute its impact 13,K3,CO3 and harmful effects due to the usage of fertilizers and pesticides.

#### OR

- b) Demonstrate the measures recommended for an individual to 13,K3,CO3 conserve the natural resource.
- 14. a) What is rain water harvesting? Analyze the types of rain water 13,K4,CO4 harvesting in detail. Why it is important now-a-days?

#### OR

- b) Examine the causes, effects, and control measures of (i) Ozone 13,K4,CO4 layer depletion, (ii) Acid rain.
- 15. a) Analyze the role of information technology in environment and 13,K4,CO5 human health.

### OR

b) Summarize the origin of HIV, modes of transmission, symptoms <sup>13,K4,CO5</sup> and control measures of AIDS.

## $PART - C (1 \times 15 = 15 Marks)$

16. a) Demonstrate the various steps involved in solid waste 15,K3,CO6 management in detail with flow sheet.

#### OR

b) Illustrate the important provisions in Environmental protection act, air 15,K3,CO6 act and water act.