

Environmental Science and Technology

(End Exam- 2024)

Time: 120 minutes

Total Marks: 50

Instructions: 1. Write answers as **POINTS** only

2. Write only **RELEVANT POINTS DISCUSSED IN THE CLASS**

Section-I: Match the Following [write number in the bracket] (5 Marks) [COs-1to6]

A. **Computer components**

1. Printed circuit boards
2. Computer batteries
3. Capacitors and transformers
4. Switches & flat screen monitors
5. Cable insulation/coating

Chemical constituents

- | | |
|--------------------------------|---------|
| a. Cadmium | [] |
| b. Poly Chlorinated Bi phenyls | [] |
| c. Poly Vinyl Chloride | [] |
| d. Lead & cadmium | [] |
| e. Mercury | [] |

B. **Source Material**

1. Pipe Insulation
2. Furniture
3. Air fresheners / moth balls
4. Paint stripper / thinner
5. Heating and cooling ducts

Pollutant

- | | |
|--------------------------|---------|
| a. Methyl chloride | [] |
| b. Chloroform | [] |
| c. Mold, bacteria | [] |
| d. Para dichloro benzene | [] |
| e. Asbestos | [] |

Section-II: What is (5 marks) [one or two sentences] [COs-1,3,5]

- | | | |
|----------------------|----------------------|----------------|
| a. Basel Convention | b. Ramsar Convention | c. Moore's law |
| d. Green certificate | e. Art-51-A(g) | |

Section III: Give an example (5 marks) [COs-1, 5]

- | | |
|--|-------------------------------------|
| a. Source isolation strategy in indoor air quality maintenance | d. Green website |
| b. No Money: No Existence | e. Non-Marketed Environmental Goods |
| c. Conservation ethics | |

Section IV: Differentiate between (10 marks) [COs-3,4, 5]

- | | | |
|---|--|-----------------------------|
| a. Thick and Thin client | b. Strong and weak sustainability | c. Green Tax and Green Cess |
| d. Libertarian and Ecological Extension | e. Green computing and Green Engineering | |

Section-V [10 marks] [COs-1, 4]

1. What are the four factors of production considered in National income?
2. How SEEA has expanded and complemented SNA?
3. How is ventilation measured in mechanically ventilated buildings?
4. What are the negative impacts of Tehri Dam?
5. Relate Hicksian income with Green accounting ?

Section-VI [15 marks] [COs-1, 2, 5, 6]

1. Explain the impact of smart phone/mobile devices production on environment?
2. Explain the basic difference between anthropocentrism, biocentrism and ecocentrism views on the environment?
3. Explain the impact of Denim manufacturing on water consumption and pollution?
4. What is SNA? Define its framework? Why did the concept of SNA remain so popular for longer time (only list the factors)?
5. Explain any two Green engineering principles?