

Environmental Science and Technology

(End Exam- 2024)

Total Marks: 50

Time: 120 minutes

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 | Chemical constituents | |
|------------------------------------|--------------------------------|-----|
| 1. Printed circuit boards | a. Cadmium | [] |
| 2. Computer batteries | b. Poly Chlorinated Bi phenyls | [] |
| 3. Capacitors and transformers | c. Poly Vinyl Chloride | [] |
| 4. Switches & flat screen monitors | d. Lead & cadmium | [] |
| 5. Cable insulation/coating | e. Mercury | [] |
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- | B. Source Material | Pollutant | |
|--------------------------------|--------------------------|-----|
| 1. Pipe Insulation | a. Methyl chloride | [] |
| 2. Furniture | b. Chloroform | [] |
| 3. Air fresheners / moth balls | c. Mold, bacteria | [] |
| 4. Paint stripper / thinner | d. Para dichloro benzene | [] |
| 5. Heating and cooling ducts | 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
☒ b. No Money: No Existence ☒ d. Green website
☒ c. Conservation ethics ☒ e. Non-Marketed Environmental Goods

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?