RollNo.:.....

National Institute of Technology, Delhi

Name of the Examination: B. Tech

Branch: ECE & EEE **Semester: First**

Title of the Course: Environmental Studies **Course Code: MEL 101**

Time: 3 Hours **Maximum Marks: 50**

Note: ***Attempt All Questions from Sections A, B, C as per instructions***

SECTION: A (Very short Answer Type Questions). ***(Marks: 1 x 10 = 10)***

1. What are the methods to control Thermal pollution?
2. What is the difference between climate and weather?
3. Define thermal stratification, digester, weather and climate
4. Write the full forms of IPCC, UNFCC, CDM and ODS
5. Differentiate between Humidity and Relative humidity
6. What is the significance of BOD and COD tests in wastewater treatment?
7. Why Ozone depletion is greater in Antarctica than North Pole?
8. Explain Minamata and Itai-Itai disease?
9. Why water vapor does not reach to stratosphere?
10. Why earth re-emits radiation in the form of IR?

SECTION: B- Attempt any FOUR questions. ***(Marks: 5 x 4=20)***

1. Explain Ozone chemistry and its depletion under natural and polluted atmosphere. Also, discuss the effects of Ozone layer depletion and Montreal protocol.
2. Explain the significance of Green House Effect? Discuss in detail the mechanism of enhanced green house effect and its impact on Environment
3. What are the factors responsible for loss of Biodiversity? Also, Write a detailed not on Man and Biosphere Programme (MAB)
4. Differentiate between pollutant and contaminant. Explain in detail the sources of water pollution and design of wastewater treatment plants with the help suitable diagrams.
5. Write a detailed note on (any two)
   a. Acid Rain b. Soil pollution c. Values and Conservation of Biodiversity

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SECTION-C: Attempt any TWO questions

(Marks: 10 x 2 =20)

1. Define renewable and nonrenewable resources. Explain in detail the microbiology, conditions and microorganisms involved in anaerobic digestion. Also, discuss its advantages and disadvantages
2. What is the difference between Photochemical and classical smog? Explain in detail the formation, nature, conditions, effects and control measures of Photochemical smog.
3. Define air pollution. Write a detailed note on generation, effects of air pollution (on human health, buildings and plants) and control measures.