[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5589

J

Unique Paper Code

2182012402

Name of the Paper

Environmental Toxicology (DSC-11)

Name of the Course

B.Sc. Environmental Sciences

Semester

II

Duration: 2 Hours

Maximum Marks: 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

- 2. Answer any four questions.
- 3. All Questions carry equal marks.
- 1. (a) Which strategy would you recommend for preventing eutrophication in freshwater bodies? Explain your answer using nutrient management examples.

(8)

- (b) Toxic air contaminants and water pollutants play a significant role in public health crises. Explain. (7)
- 2. Write short notes on the following:

 $(3\frac{1}{2}\times 4=15)$

- (a) Ozone depletion and its ecological consequences
- (b) Health effects of soil contamination by heavy metals
- (c) Properties and environmental behavior of nanoparticles
- (d) Principles of environmental justice in toxic waste management

3. Differentiate the following (any three):

 $(5 \times 3 = 15)$

- (a) Biomagnification vs. Bioaccumulation
- (b) Primary vs. Emerging air pollutants
- (c) Acute toxicity vs. Chronic toxicity
- (d) PFAS (Per- and Polyfluoroalkyl substances) vs. Microplastics
- 4. (a) What do you understand by Superfund sites and Brownfields with respect to their relevance in urban redevelopment? (8)
 - (b) Discuss the key roles of international environmental regulations in controlling hazardous waste. (7)
- 5. (a) Evaluate and justify that radiation toxicology is more complex due to the delayed onset of health effects. (8)
 - (b) Elaborate upon emerging environmental toxicants in the context of climate change impacts. (7)

