

5589/100

Unique Paper Code: 2182012402

Name of the Course: Environmental Toxicology (DSC-11)

Name of the Programme: B.Sc. Environmental Sciences

Semester: II

Duration: 2 hours

Maximum Marks: 60

Instructions for Candidates

Write your Roll no. on the top immediately upon receipt of this question paper.

Answer any **four** questions. 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: (3½×4=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): (5×3=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)