

**Five-Year Integrated M.Sc. Examination 2021-22**

**Semester-VII**

**Earth and Environmental Science**

**Paper: EES-4-7-2**

**Subject: Environmental Toxicology**

**Time: 4 Hours**

**Full Marks: 80**

Questions are of value as indicated in the margin  
Answer Question **No. 1** and **any four** from the rest

1. Write short notes on **any four**. 4x4 = 16
  - a) COPD
  - b) Metal fume fever
  - c) Toxic effects of Arsenic
  - d) Active Transport
  - e) LD50
  - f) Cytochrome P450
  
2. Explain the effects of Lead on Hemoglobin formation. Give a note on toxicity of lead. 12+4 = 16
  
3. Give a note on Asbestos. Discuss the toxic effects of it. 4+12 = 16
  
4. What are the various physico-chemical and biological factors which lead to the global transport of POPs. 16
  
5. What do you understand by environmental toxicology? What are toxicants? Discuss the various classes of toxicants. 4+2+10 = 16
  
6. What is the difference between biotransformation and detoxification? “Phase I and Phase II enzymes help in biotransformation of chemicals” Discuss. 4+12 = 16
  
7. Discuss the structure and function of Glutathione. How does GSH-S-T conjugate the reaction with GSH of electrophilic compounds to form mercapturic acid? 8+8 = 16