

Question Paper Code : 6445

M.Sc. (Semester-IV) Examination, 2018

(Regular & BP/Imp.)

ENVIRONMENTAL SCIENCE

[Sixth Paper]

(Environmental Toxicology-II)

Time : Three Hours]

[Maximum Marks : 70

Note : Attempt **five** questions in **all**. Question **No. 1** is **compulsory**. Attempt **one** question from each unit.

1. Describe briefly the following : **(Any ten)** [3x10=30]

- (a) LD₅₀
- (b) Biopesticides
- (c) Biotransformation
- (d) Proto-Oncogenes
- (e) Mutagenicity
- (f) Active and passive transport
- (g) Cytochrome P450

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(1)

[P.T.O.]

- (h) Harmful effects of chemical pesticides
- (i) Retroviruses
- (j) Tumor Suppressor Genes
- (k) Arsenic toxicity

UNIT-I

2. Briefly explain the hepatic manifestations of alcohol after overconsumption : emphasizing on its detoxification mechanism. [10]
3. Write notes on **any two** of the following : [5x2 = 10]
 - (i) Stages of liver injury
 - (ii) Neurodegenerative disorder with example
 - (iii) Competitive ELISA

UNIT-II

4. What is Cardiotoxicity ? Add a note on toxicant induced-cardiac toxicity. [10]
5. Write notes on **any two** of the following : [5x2 = 10]
 - (i) Type II hypersensitivity
 - (ii) Action potential

6445/100 (2)

- (iii) Asphyxiants with example

UNIT-III

6. What are chemical pesticides ? Describe the types of pesticide induced-toxicity, their uses and harmful effects with suitable examples. [10]
7. Write notes on **any two** of the following : [5x2 = 10]
 - (i) Herbicides
 - (ii) Advantages of biopesticide
 - (iii) Rodenticides

UNIT-IV

8. Give an account of cadmium toxicity in plants and animals, its sources as well as their control measures. [10]
9. Write notes on **any two** of the following : [5x2 = 10]
 - (i) Mercury
 - (ii) Chromium
 - (iii) Lead

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