

**Semester Examinations – B.Sc.-M.Sc. Integrated (Toxicology) Programme-
2nd year; Semester III (2022)**

INTRODUCTION TO TOXICOLOGY (BTX-CC-07-TH)

Time: 3 hours

MM: 75

This question paper contains 5 questions, each of 15 marks.

Q1. Answer all questions. [1.5 x 10]

- a). Name the scientist who developed the arsenic detection test.
- b). Define LOAEL.
- c). What is the public health scope of toxicology?
- d). Who wrote the book 'Silent Spring'?
- e). Which heavy metal associated with Minamata poisoning episode?
- f). Which cell organelle is the major source of cytochrome P450?
- g). Write full form of OECD.
- h). Write full form of PCB, PAH, and POP.
- i). Define toxicokinetics (TK).
- j). Name one hydrolysis reaction enzyme involved in alcohol metabolism.

Q2. Describe various routes of absorption of toxic chemicals and site of absorption.

[15]

[OR]

What is importance of dose-response relationship? Define hormesis.

Q3. Elaborate various ways in which a toxic chemical is metabolized.

[15]

[OR]

Q4. How toxic chemicals are distributed and stored in the body? Name two storage depots of toxic chemicals with names of toxic chemicals.

[15]

[OR]

Describe various mechanisms of excretion of toxic chemicals.

Q5. Write short notes on any THREE of the following.

[3 x 5]

- a). Why we need alternatives in toxicity testing?
- b). First pass metabolism.
- c). Antagonistic interactions of chemicals.
- d). Carbon tetrachloride toxicity.
- e). Glutathione.

— End of Question Paper —