

No. of Printed Pages : 3

MVP-005

**M. SC. IN FOOD SAFETY AND
QUALITY MANAGEMENT (MSCFSQM)**

Term-End Examination

December, 2024

**MVP-005 : FOOD TOXICOLOGY AND PUBLIC
HEALTH**

Time : 3 Hours

Maximum Marks : 100

Note : Answer any *five* questions. All questions carry equal marks.

1. (a) Explain the following (any *five*) : $5 \times 2 = 10$
 - (i) Toxicodynamics
 - (ii) Lethal concentration
 - (iii) Hormesis
 - (iv) ADME
 - (v) MRL
 - (vi) NOAEL
 - (vii) Epidemiology
- (b) Describe the process of metabolism of toxicants in human body. 10

D-3007/MVP-005

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2. (a) Narrate the sample preparation, processing and extraction techniques required for analysis of toxicants. 15
- (b) Write the objectives of the most widely used and the simplest toxicity test. 5
3. Write notes on the following : 4×5=20
- (a) Food intolerance
- (b) Food allergy
- (c) Hypervitaminosis
- (d) Food adulteration
4. (a) Classify pesticides based on target pests, toxicity level and mode of actions. 10
- (b) Give the mode of action of any *one* pesticide. How can the pesticide residues in food be reduced ? 5+5
5. (a) Discuss the phytotoxins that may affect human through consumption of contaminated food. 10
- (b) Elaborate the sources, toxicity and symptoms of nitrosamines and preventive strategies for their reduction. 10

[3]

6. What do you understand by GRAS ?
Discuss the toxicity of food additives and
nutraceuticals. 4+16
7. (a) Write notes on marine biotoxin and
mycotoxins. 10
- (b) Outline the process of data collection
analysis, interpretation and dissemination
in food surveillance system. 10

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