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**MVP-005**

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

**Term-End Examination**

**June, 2024**

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

*Time : 3 Hours*

*Maximum Marks : 100*

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**Note :** (i) *Attempt any **five** questions.*

(ii) *All questions carry equal marks.*

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1. (i) Explain the following (any **five**) :  $5 \times 2 = 10$
- (a) Food Toxicology
  - (b) LD50
  - (c) MRL
  - (d) ADI
  - (e) Xenobiotic
  - (f) Toxicokinetics
  - (g) Zootoxin
- (ii) Discuss the factors affecting toxicity of compounds. 10

**P. T. O.**

2. Give the primary entry routes of toxicants in human body. Describe the process of absorption and distribution of toxicants in our body. 4+16
3. Discuss the natural toxins of plant and marine sources. 20
4. Write the characteristics of heavy metals and their sources in soil-crop system. Explain the toxicity, sources of exposure and outbreaks of any *two* heavy metal contamination. 10+10
5. Write notes on the following : 4×5=20
  - (i) Toxicity of acrylamide and its preventive strategies.
  - (ii) Toxicity and mitigation of polycyclic aromatic hydrocarbon.
  - (iii) Toxicity of food additives
  - (iv) Causes of veterinary drug residues in food.
6. Discuss the steps of any disease outbreak investigation. 20
7. (i) Describe any *two* bacterial toxins with respect to their toxicity symptoms, prevention and control. 10
  - (ii) Give the definition, objectives and types of food surveillance. 10