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**MVP-005**

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

**Term-End Examination**

**December, 2025**

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

*Time : 3 Hours*

*Maximum Marks : 100*

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

(ii) All questions carry equal marks.

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1. Define the following (any *ten*) :  $10 \times 2 = 20$
- (a) Acceptable daily intake
  - (b) Xenobiotic
  - (c) Lethal dose
  - (d) Biotransformation
  - (e) Genotoxicity
  - (f) Maximum residue limit

- (g) Endotoxin
  - (h) GRAS
  - (i) Incubation period
  - (j) Epidemiology
  - (k) Withdrawal period
2. Write short notes on the following (any *four*) : 4×5=20
- (a) Food allergy
  - (b) Organochlorine compound toxicity
  - (c) Causes of veterinary drug residues in food
  - (d) Bisphenol-A toxicity
  - (e) Epidemiological triad of food-borne disease
3. (a) Describe the factors that affect toxicity of compounds. 10
- (b) How are the toxicants absorbed by gastrointestinal tract in our body ? 10
4. (a) Enlist plant toxins and write the sources and symptoms of any *four* plant toxins. 10

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- (b) Enumerate major heavy metals found in food. Explain the toxicity of *four* such heavy metals. 2+8
5. (a) Give a detailed account of sources, toxins, mode of action, symptoms and control measures of any *one* bacterial toxin. 10
- (b) How are PAAs and PAHs formed in food ? Explain how their formation can be reduced. 5+5
6. (a) Briefly discuss the toxicity of food additives. 10
- (b) Narrate the factors that contribute to emergence of food-borne pathogens. Give examples of some emerging food-borne pathogens. 8+2
7. Describe the steps undertaken to investigate an outbreak. 20

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