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**MVPI-001**

**POST GRADUATE DIPLOMA IN FOOD  
SAFETY AND QUALITY  
MANAGEMENT (PGDFSQM)  
Term-End Examination  
December, 2023  
MVPI-001 : FOOD MICROBIOLOGY**

*Time : 2 Hours*

*Maximum Marks : 50*

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

(ii) All questions carry equal marks.

(iii) All the parts of a question must be attempted together.

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1. Define any *five* of the following terms :  $5 \times 2 = 10$
- (a) Mycology
  - (b) Halophile
  - (c) Psychrotrophs
  - (d) Aflatoxin
  - (e) MISO
  - (f) Spore

**P. T. O.**

2. (a) Explain the role of microorganisms in foods. 5
- (b) What is a bacterial growth curve ? Draw and explain the various stages. 5
3. State the principles of food preservation and explain heat as an agent of preservation. 10
4. (a) What are the types of food-borne diseases ? 5
- (b) Name *five* common food-borne pathogens and their symptoms. 5
5. (a) Write a note on fermented foods and their importance. 5
- (b) What is Food Fermentation Technology ? 5
6. (a) What is the role of cell wall structure in Gram's staining ? 5
- (b) State the protocols for detection of *Listeria monocytogens*. 5
7. Write notes on the following : 2×5=10
- (a) ELISA
- (b) Nucleic Acid Probes

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8. (a) How will you detect the presence of proteolytic and lipolytic organisms in food sample ? 5
- (b) What is the role of culture media in the enumeration of different types of microorganisms ? 5