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**MVPI-001**

**P. G. DIPLOMA IN FOOD SAFETY AND  
QUALITY MANAGEMENT (PGDFSQM)**

**Term-End Examination**

**June, 2022**

**MVPI-001 : FOOD MICROBIOLOGY**

*Time : 2 Hours*

*Maximum Marks : 50*

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**Note :** Answer any **five** questions. All questions carry equal marks. All the parts of a question must be attempted together.

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1. Explain the following terms (any ten) :  $1 \times 10 = 10$ 
  - (a) Bacteriocin
  - (b) Endospore
  - (c) Stationary phase
  - (d) Food acids
  - (e) Enteropathogenic organism
  - (f) Virulence
  - (g) DMC
  - (h) MBRT

**P. T. O.**

- (i) EMB
  - (j) CFU
  - (k) ELISA
  - (l) PCR
2. Give *two* examples each for the following microorganisms in food : 2×5=10
- (a) *Two* mold genera
  - (b) *Two* yeast genera
  - (c) *Two* viruses with high potential as food contaminants
  - (d) *Two* lactic acid bacteria
  - (e) *Two* proteolytic bacteria
3. Enumerate intrinsic and extrinsic parameters affecting microbial growth. 10
4. (a) Enumerate various types of food poisoning with suitable example for each. 6
- (b) Explain the purpose of fermentation. 4
5. (a) Explain the following : 2 each
- (i) Presumptive test for coliform detection
  - (ii) Endospore staining

- (b) Describe the methods for detection of *B. cereus*. 6
6. (a) Enumerate any *ten* fermented foods. 5
- (b) Enumerate various methods used for detecting viruses extracted from food. 5
7. (a) Enlist the need for rapid detection techniques of microorganisms in food. 3
- (b) What is impedance ? How can it be used to detect microbes ? 3
- (c) Explain the principle of DNA probes. 4