

POST GRADUATE DIPLOMA IN FOOD SAFETY AND QUALITY
MANAGEMENT (PGDFSQM)

Term-End Examination

December, 2019

MVPI-001 : FOOD MICROBIOLOGY

Time : 2 hours

Maximum Marks : 50

- Note :**
- (i) Attempt *any five* questions.
 - (ii) All the questions carry *equal* marks.
 - (iii) All the parts of a question must be attempted together.

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1. Match the following : 1x10=10
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|--------------------------|-------------------------------------|
| (a) Peptidoglycan | (i) Require oxygen |
| (b) Moist heat | (ii) Study of Algae |
| (c) Phycology | (iii) Cell wall |
| (d) Saccharomyces | (iv) Auto clave |
| (e) Aerobic | (v) Yeast |
| (f) Avian Influenza H5N1 | (vi) Nucleic acid test |
| (g) <i>E. Coli</i> | (vii) Virus |
| (h) Thermoduric | (viii) <i>Staphylococcus aureus</i> |
| (i) Coagulase test | (ix) Gram negative |
| (j) PCR | (x) Survive Pasteurization |
2. (a) Describe the different type of microbiological media. • 5+5=10
(b) Briefly describe the fermented soyabean products.
3. Write brief note on : 5x2=10
- (a) ELISA technique
 - (b) Nucleic Acid Probes
4. (a) Define spoilage. What are the types of spoilage encountered in food products ? 1+4
(b) What are the extrinsic factors that affect spoilage ? 5
5. (a) What are the various types of staining used to study bacterial cultures ? 5
(b) What are the components of flow cytometry ? 5

6. Write short notes on **any four** of the following : 2.5x4=10
- (a) MBRT
 - (b) Biosensors
 - (c) Growth curve of microorganisms
 - (d) Mycotoxins
 - (e) Diseases caused by Parasites
7. (a) Enlist the principles of food preservation. 4
- (b) Differentiate between endotoxins and exotoxins. 4
- (c) Give two examples of diseases caused by natural toxins. 2
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