01145

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

Term-End Examination

December, 2018

MVPI-001 : FOOD MICROBIOLOGY

Time : 2 hours   *Maximum Marks : 50*

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

     *(ii)   **All** questions carry **equal** marks.*

1.   Match the following :   1x10=10

(a)   Listeria   (i)   Bacteriocins

(b)   Ochratoxin   (ii)   Blood Agar

(c)   Halophiles   (iii)   Yeast

(d)   UV radiation   (iv)   Aspergillus

(e)   Thermostable   (v)   Food-borne
       Nuclease test   pathogen

(f)   Enriched media   (vi)   Soyabean

(g)   Hepatitis A   (vii)   Salt tolerant
                                 organisms

(h)   Biopreservation (viii)   Emerging food-
                                  borne pathogen

(i)   Candida   (ix)   Staphylococcus

(j)   Tempeh   (x)   Meat storage

2. Define the following : 2x5=10
   (a) Endotoxin
   (b) Proteolysis
   (c) Temperature danger zone
   (d) Water activity
   (e) Osmophilic microorganisms

3. State the significance of the following in food safety (any two) : 5x2=10
   (a) Detection of food-borne pathogens
   (b) Biochemical Tests
   (c) Immunological methods

4. Define the term Probiotic, Prebiotic and Synbiotic. What are the possible health benefits of Probiotics ? 3+7=10

5. (a) Explain the role of Intrinsic parameters in affecting the growth of microorganisms in foods. 6+4=10
   (b) Describe the spoilage of fruits and vegetables due to molds.

6. (a) What are the main principles of food preservation ? 3+7=10
   (b) Give the procedure for the detection of *Staphylococcus aureus* in a food sample using conventional technique.

7. Write short notes on **any four** of the following :
   (a) Membrane filters 2½x4=10
   (b) Botulism
   (c) Bacterial Growth Curve
   (d) Bacteriophage
   (e) CAMP Test