MVPI-001

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

Term-End Examination

June, 2020

MVPI-001 : FOOD MICROBIOLOGY

Time : 2 Hours   *Maximum Marks : 50*

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

(ii) *All questions carry equal marks.*

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

1. Match the following :   1 each

   (i) Petroff-Hausser Counter   (a) Milk quality

   (ii) Laminar airflow   (b) Protozoa

   (iii) Comma shaped   (c) Below 8°C

P. T. O.

(iv)　Cold storage　　(d)　Aseptic work area

(v)　Spore　　(e)　Vibrio

(vi)　*Toxoplasma gondii*　　(f)　Direct microscopic count

(vii)　MBRT　　(g)　Inactive or Dormant state

(viii)　MYP Agar　　(h)　Degree of Pathogenicity

(ix)　Salmonella　　(i)　*Bacillus cereus*

(x)　Virulence　　(j)　BSA, XLD Agar

2. What are the sources of food contamination ? Explain intrinsic factors affecting food spoilage.

5 + 5

3. Write brief notes on the following :　　5 each

   (a) PCR

   (b) DNA chips and microarrays

4. (a) Write the importance of fermented foods. 5

   (b) What are secondary metabolites ? Give *three* examples.　　2 + 3

5. (a) Explain the dye reduction tests used to detect quality of milk. 5

   (b) Define different fermented dairy products.

   5

6. Write short notes on any *four* of the following :

   $2\frac{1}{2}$ each

   (a) Negative Staining

   (b) Antibiotic Resistance

   (c) CAMP test

   (d) Water activity

   (e) Bacterial growth curve

7. (a) Explain the common methods of food preservation. 5

   (b) Explain the principle of LST-MUG method for the detection of *E. coli*. 5

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