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MVPI-001

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

Term-End Examination

June, 2016

MVPI-001 : FOOD MICROBIOLOGY

Time : 2 hours *Maximum Marks : 50*

Note : *Attempt any five questions. All questions carry equal marks.*

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1. Explain the following terms briefly **(any five)** : **5x2=10**
   (a) Water activity
   (b) Intoxications
   (c) Food spoilage
   (d) MPN method
   (e) Viral pathogens
   (f) Pure culture methods.

2. Explain 'Standard Plate Count Method' for bacterial enumeration. **10**

3. Fill in the blanks : **10x1=10**
   (a) _____ is not a natural environment for micro - organisms.
   (b) In 'Swab - Rinse' method the diluent used is _____ .
   (c) Micro - organisms that requires high levels of salt for growth are _____ .
   (d) The science of biological classification is _____ .

(e) Micro - organisms that cause disease are called _____ .

(f) _____ is a fermented cabbage product.

(g) The term _____ is used when a product contains both probiotics and prebiotics.

(h) Saccharomyces is an example of _____ .

(i) a_w of _____ is equivalent to RH of 95%.

(j) _____ is inactive or dormant state of rod shape bacteria.

4. Explain the following **(any two)** : **2x5=10**

(a) Common methods of food preservation

(b) Emerging food borne diseases.

(c) Detection and enumeration of spoilage micro - organism.

5. (a) What is the need of rapid detection techniques of micro - organisms ? **6**

(b) Comment on techniques of gm staining of bacteria. **4**

OR

Comment on technique of spore staining of bacteria.

6. Give an account of Extrinsic and Intrinsic factors responsible for spoilage. **10**

7. Explain Microbial Growth Curve with diagram. **10**

8. Write short notes on **any two** : **2x5=10**

(a) CAMP Test

(b) Food borne diseases and agents

(c) Microbiological media