

**POST GRADUATE DIPLOMA IN FOOD SAFETY AND
QUALITY MANAGEMENT**

**Term-End Examination
June, 2014**

MVPI - 001 : FOOD MICROBIOLOGY

Time : 2 hours

Maximum Marks : 50

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

1. Match the following :- 1x10

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|-----------------------------|---------------------|
| (i) Catalase negative | Amplification |
| (ii) EMB | Cabbage |
| (iii) Differential Staining | Mycotoxin |
| (iv) PCR | Heat Resistant form |
| (v) Food borne protozoan | Bacillus |
| (vi) Spore | Shigella |
| (vii) Gram negative rod | Enterobacter |
| (viii) Aspergillus | Anaerobes |
| (ix) Sauerkraut | Entamoeba |
| (x) Putrefaction | LAB |

2. (A) Identify the micro-organisms 5
- (i) Baker's yeast
 - (ii) Grows on PDA
 - (iii) Gram positive rod
 - (iv) Anaerobic spore formers
 - (v) Used in production of vinegar
- (B) Justify the statement that Food Microbiology 5
is an applied branch of biology.
3. (a) Draw a bacterial cell and explain its 5
structure
- (b) What is the difference between Gram 5
positive and Gram negative cell wall ?

4. Give the principle of the following 2½x4 =10
- (i) Standard Plate Count
 - (ii) MPN
 - (iii) MBRT
 - (iv) PCR
5. (a) Differentiate between Food infection and Food intoxication 4
- (b) List the emerging pathogens of concern of food origin 6
6. (a) State the role of lactic acid bacteria in food fermentation 6
- (b) What is BSE ? 4

7. Write short notes on (any four)

2½x4 =10

- (a) Coliforms
- (b) Bacteriological Examination of Water
- (c) Tempeh
- (d) Sporulation
- (e) Mycotoxins

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