

**POST GRADUATE DIPLOMA IN FOOD SAFETY  
AND QUALITY MANAGEMENT (PGDFSQM)****Term-End Examination****December, 2011****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. Give one example of each : **1x10=10**
- (a) Gram negative rod
  - (b) Endospore former
  - (c) Food virus
  - (d) Mycotoxin producer
  - (e) Differential staining
  - (f) Acetic acid producer
  - (g) Proteolytic micro organism
  - (h) Rapid method for microbial enumeration
  - (i) Selective culture medium
  - (j) Cocci in bunches
2. Define the following : **2x5=10**
- (a) Coliforms
  - (b) Food Safety
  - (c) Probiotic
  - (d) Food Contamination
  - (e) Fermentation.

3. Differentiate between : 2x5=10
- (a) Mold vs yeast
  - (b) Food Infection vs Food Intoxication
  - (c) Catalase test vs Oxidase test
  - (d) Aspergillus vs Penicillium
  - (e) Halophiles vs Osmophiles
4. (a) Define spoilage. 3
- (b) List the common physical and chemical 7  
changes associated with spoilage of foods.
5. Explain the principle of the following methods  
(any two) : 2x5=10
- (a) Flow Cytometry
  - (b) ELISA
  - (c) PCR.
6. (a) What is Food Fermentation Technology ? 5
- (b) List the common (five) food borne diseases 5  
along with their causative organism.
7. Write short notes on : ( *any four*) 2.5x4=10
- (a) Biosensor
  - (b) Water Activity
  - (c) BSE
  - (d) MPN test
  - (e) Oriental fermented foods.
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