Time: 3 hours

Maximum Marks: 70

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POST GRADUATE DIPLOMA IN FOOD SCIENCE AND TECHNOLOGY (PGDFT)

Term-End Examination December, 2013

MFT-002: FOOD MICROBIOLOGY

Note: Attempt any seven question in all.

spoilage.

Prebiotics vs symbiotics.

Define fermentation.

with examples.

(b)

(c)

(d)

(a)

(b)

3.

2x5=101. Give two examples of each: Food borne virus. (a) (b) Spore Fermer. (c) Starter bacteria. (d) Probiotic Organism. (e) Mycotoxin. 2. Differentiate between: 2.5x4=10(a) Flat Sour Spoilage vs Sulphide Stinker

Homofermentation vs Heterofermentation.

Vinegar production vs Bread production.

List different types of food fermentations

| 4 . | (a) | Differentiate between food infection and | 3 |
|------------|---|---|------|
| | | Food intoxication. | |
| | (b) | Explain the food intoxication caused by a | 7 |
| | | Gram positive cocci in details. | |
| 5. | Explain the following (any four): 2.5x4= | | 4=10 |
| | (a) | Food microbiology is an applied science. | |
| | (b) | pH affects the type of microbial growth. | |
| | (c) | Enrichment is a critical step in pathogen detection. | |
| | (d) | Heat is a good source to control the growth of micro organisms. | |
| | (e) | Fermented foods are also a type of functional foods. | |
| | | Turictional Toods. | |
| 6. | State the principle of the following methods: | | |
| | (a) | SPC 2.5x | 4=10 |
| | (b) | DMC | |
| | (c) | DEFT | |
| | (d) | MBRT | |
| 7. | (a) | State the factors responsible for the spoilage | 5 |
| | (1-) | of fruits and vegetables giving examples. | _ |
| | (b) | How do gases act as a preservative? Explain briefly. | 5 |
| 8. | Write short notes: 2.5x4=1 | | 4=10 |
| | (a) | Quental foods | |
| | (b) | · · | |
| | (c) | Enterotoxins | |
| | (d) | Rapid methods of detection of microbes | |
| | (4) | imply methods of detection of fillerobes | |