

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

M.Sc (Food Technology) (2018 Batch) (Sem.-1)

FOOD MICROBIOLOGY

Subject Code : MSFT-513-18

M.Code : 75593

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A contains SEVEN questions carrying TWO marks each and students has to attempt ALL questions.**
2. **SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying FOURTEEN marks each and student has to attempt any ONE question from each Subsection.**

SECTION-A

- 1. Write briefly :** **(7x2=14)**
- a) Write the role of Antonie van Leeuwenhoek in the field of microbiology.
 - b) What do you understand by multicellular along with example.
 - c) Enlist the two intrinsic factors which effect the microbial growth.
 - d) Write the name of two microorganisms used in fermented milk products.
 - e) What is food poisoning?
 - f) What do you understand by hurdle technology?
 - g) Define High Pressure processing.

SECTION-B

UNIT-I

2. a) Write briefly five kingdom classification. (10)
b) Types of microorganisms normally associated with food. (4)
3. Define Cell Wall. Differentiate between the prokaryotes and eukaryotes along with diagram. (14)

UNIT-II

4. a) Explain the different four extrinsic factors which effect the microbial growth. (8)
b) Write short note on the biochemical changes caused by microorganisms. (6)
5. a) What is water activity? Explain the different methods used for food preservation.(10)
b) Explain some of the important microorganisms in food microbiology. (4)

UNIT-III

6. Define Vinegar. Explain the different fermented fruits and vegetables products. (14)
7. Write short note on :
 - a) Fermented meat and fish products (7)
 - b) Single cell protein (7)

UNIT-IV

8. What is food safety? Explain the various principles of HACCP system for food production. (14)
9. Write short note on :
 - a) Bacterial agents of food borne illness (7)
 - b) Poisonous algae and fungi (7)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.