



Seat No. : _____

MN-206

May-2025

B.Sc., Sem.-IV

MI-205 : Microbiology

(Food & Dairy Microbiology)

(Theory)

Time : 2:30 Hours]

[Max. Marks : 70

- Instructions :** (i) All questions are compulsory.
(ii) Figures on the right indicates marks.
(iii) Mention correct question number against the answer.
(iv) Draw figures wherever necessary.

1. Discuss in detail the food and milk borne bacterial infections. **14**

OR

1. (A) Write a note on food as a substrate for microorganisms. **7**

1. (B) Describe the role of bacteria in food poisoning. **7**

2. Write a detailed note on food and milk preservation using temperature. **14**

OR

2. (A) Describe the spoilage of canned foods. **7**

2. (B) Discuss the food and milk preservation using radiations. **7**

3. Write a detailed note on various types, curdling, processing and ripening of cheese. **14**

OR

3. (A) Discuss the mushroom and spirulina as microbial foods. **7**

3. (B) Describe probiotics, prebiotics and synbiotics in detail with proper examples. **7**

4. Describe the microbiological criteria used for food safety and discuss the various food certification marks in India. 14

OR

4. (A) Write a note on grading of milk. 7
4. (B) Discuss acid fast staining and give its importance in food safety. 7

5. Give short and specific answers in **1-2** lines only : (Any **seven**) 14

- (1) Name two molds that cause food poisoning.
 - (2) Name two foods having natural antimicrobial agents.
 - (3) Name the toxins produced by *Staphylococcus aureus* and *Claviceps purpurea*.
 - (4) What is putrefaction ? Give example of milk putrefying organism.
 - (5) Write two points of differences between Pasteurization and Sterilization.
 - (6) Name two microorganisms causing ropiness in food.
 - (7) What is kefir ? Write benefit of drinking kefir.
 - (8) Name two bacteria involved in fermentation of yogurt.
 - (9) Define : Starter culture. Write its one significance.
 - (10) What is total viable count ? What does it represents ?
 - (11) What is MPN ? Which microorganism is tested by this method ?
 - (12) Write one significance and use of phosphatase test.
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