

Seat No. : \_\_\_\_\_

**AK-102**

April-2023

**B.Sc., Sem.-IV**

**205 : Microbiology  
(Food and Dairy Microbiology)**

**Time : 2:30 Hours]**

**[Max. Marks : 70**

- Instructions :**
- (1) All the questions are compulsory.
  - (2) Figures on the right-hand side indicates the marks.
  - (3) Mention correct question number against the answer.
  - (4) Draw figures wherever necessary.

1. What is food borne infection ? Describe the role of bacteria in food borne infections. **14**

**OR**

- (A) Explain intrinsic factors that influence number of micro-organisms. **7**
- (B) Write a note on food poisoning caused by *Staphylococcus*. **7**

2. Describe any **two** methods of food preservation in detail. **14**

**OR**

- (A) Describe microbial spoilage of milk and milk products. **7**
- (B) Discuss food preservation by low temperature. **7**

3. Describe role of microbes in production of different types of cheese. **14**

**OR**

- (A) Write a note on Yogurt and kefir. **7**
- (B) Write a note on Single cell protein. **7**

4. What is bacteriological analysis of milk ? Describe phosphatase test and acid-fast staining in detail. **14**

**OR**

- (A) Write a note on FSSAI and BIS. **7**
- (B) Discuss direct microscopic count method with its advantages and disadvantages. **7**

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

**14**

- (1) Enlist names of any two mycotoxins.
  - (2) What is botulism ?
  - (3) Write names of any two enteropathogens causing food borne infection.
  - (4) Define perishable food.
  - (5) What is rancidity ?
  - (6) Name any two bacteria causing discolouration in milk.
  - (7) Define starter culture.
  - (8) Write any two names of edible mushroom.
  - (9) Differentiate the terms: probiotics and prebiotics.
  - (10) Write use of Resazurin test.
  - (11) Write the full form of HACCP and PDA.
  - (12) What is AGMARK ?
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