

Seat No. : _____

AA-123

April-2019

B.Sc., Sem.-IV

CC-205 : Microbiology

(Food and Dairy Microbiology)

Time : 2:30 Hours]

[Max. Marks : 70

- Instructions :**
- (1) Draw figures wherever necessary.
 - (2) Write correct question number against each answer.
 - (3) Figures to the right indicate marks.

1. (a) Discuss the factors affecting kinds and numbers of microorganisms in food. **14**

OR

- (1) Describe molds as food poisoning agents. **7**
- (2) Write a note on microbial flora of food. **7**

- (b) Answer in 1 – 2 lines only (any **four**). **4**

- (1) Name any one pathogenic protozoan.
- (2) Name the type of toxins produced by *S. aureus*
- (3) Give an example of food borne infection caused by virus.
- (4) Name acid fast organism commonly transmitted through milk.
- (5) What is proteolytic bacteria ?
- (6) Name two saccharolytic bacteria present in milk.

2. (a) Explain principles and methods for food preservation by high and low temperature and osmotic pressure. **14**

OR

- (1) Describe spoilage of milk and vegetables. **7**
- (2) Write a note on spoilage of canned food. **7**

- (b) Answer in 1 – 2 lines only (any **four**). 4
- (1) How is meat preserved ?
 - (2) Name two ionizing radiations.
 - (3) Who discovered the canning process ?
 - (4) What is aseptic handling ?
 - (5) Give two names of chemical preservatives.
 - (6) What 'nisin' ?
3. (a) Explain mushrooms and spirulina as food. 14
- OR**
- (1) Describe process of cheese making in brief. 7
 - (2) Write a note on yogurt. 7
- (b) Answer in 1 – 2 lines only (any **three**). 3
- (1) Name the organism used for bread making.
 - (2) Give two examples of soft cheese.
 - (3) Name the organisms used as SCP.
 - (4) What is kefir ?
 - (5) Define 'prebiotics'.
4. (a) Explain microbiological criteria of food safety. 14
- OR**
- (1) Describe the method for determination of pasteurization efficiency. 7
 - (2) Discuss the tests for identification of specific group or species of microorganisms. 7
- (b) Answer in 1 – 2 lines only (any **three**). 3
- (1) Define CFU.
 - (2) What is coliform bacteria ?
 - (3) What is MBRT ? Give it's use.
 - (4) What is the significance of MPN ?
 - (5) Name two agencies for quality control, labelling and testing of foods.