



**PO-411**

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

**B. Sc. (Sem. IV) Examination**

**April / May - 2016**

**MI-205 : Microbiology**

*(Core Course - Food & Dairy Microbiology)*

Time : 3 Hours]

[Total Marks : 70

**Instruction** : All questions are compulsory.

**PART - A**

Answer **all** questions :

**10**

- 1 Which of the following is not a food borne disease?  
(A) Gastroenteritis                      (B) Amoebiasis  
(C) Diarrhea                                (D) Malaria.
  
- 2 Kefir is produced from :  
(A) Fruits                                      (B) Milk  
(C) Vegetables                                (D) Barley
  
- 3 Spirulina belongs to which group of microorganisms?  
(A) Molds                                      (B) Yeast  
(C) Algae                                        (D) Protozoa
  
- 4 Which of the following test is used to determine presence of Coliforms ?  
(A) MBRT                                      (B) MPN  
(C) Acid fast staining                      (D) SPC

- 5 Which of the following enzymes is involved in Cheese production?  
(A) Trypsin (B) Casein  
(C) Rennin (D) Lipases
- 6 Whey is the product of which industry?  
(A) Dairy (B) Agriculture  
(C) Bakery (D) Sugar
- 7 Mycotoxins are produced by?  
(A) Bacteria (B) Fungi  
(C) Worms (D) Yeast
- 8 Acid fast staining detects presence of which bacteria in Milk?  
(A) E. coli (B) Mycobacteria  
(C) Lactobacilli (D) Streptococci
- 9 Pasteurization is a method of sterilization of  
(A) Only Milk (B) Any liquid Food  
(C) Milk and wine (D) None of these
- 10 Salted beef and meat is contaminated by:  
(A) Halobacterium Salinarium  
(B) E.coli  
(C) Pseudomonas  
(D) Clostridium.

## PART - B

Answer in brief : (any **five**) 10

- 1 Define Pasteurization.
- 2 What is the causative agent of Listeriosis and Amoebiasis?
- 3 What are starter cultures ?
- 4 Give full form of HTST and LTLT.
- 5 Significance of Phosphatase test.
- 6 Name two yeasts which are used as SCP.
- 7 Explain Souring and Roapiness.

## PART - C

Answer : (any **four**) 16

- 1 Methods of preservation of milk.
- 2 Nutritional value of Spirulina.
- 3 Probiotics, Prebiotics and Synbiotics.
- 4 Name three Food borne Diseases.
- 5 Grading of milk.
- 6 Spoilage of Poultry products and eggs.

## PART - D

Answer in Brief : (any **four**) 16

- 1 Fermentative production of Saurkraut.
- 2 Nutritional value of SCP.
- 3 Biochemical changes brought by microorganisms in food.
- 4 Role of Radiation in food preservation.
- 5 Write a note on SPC.
- 6 Draw a flow chart of Canning Process.

## PART - E

Write a short note : (any **three**) 18

- 1 Different types of cheese and its characteristics.
- 2 Methods of preservation of food.
- 3 Mushrooms as a nutrient rich food.
- 4 Discuss the M.P.N. process as a method of enumeration of Coliforms.