



AG-524

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

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

March / April - 2019

**Microbiology : MI-205 (Core Course)**

*(Food & Dairy Microbiology)*

Time : 3 Hours ]

[ Total Marks :

**PART - A**

Multiple Choice Question.

7

- 1 Which of the following is not responsible for 'Ropy' formation in Milk
  - (a) Enterobacter aerogenes
  - (b) Alcaligenes viscolactis
  - (c) Steptococcus cremoris
  - (d) E. coli
  
- 2 Which is not a fermented dairy product ?
  - (a) Sauerkraut
  - (b) Kefir
  - (c) Kumis
  - (d) Cheese
  
- 3 Rotten egg smell in canned food is due to metabolism of \_\_\_\_\_ ?
  - (a) Carbohydrate
  - (b) Organic acid
  - (c) Sulphide
  - (d) Lipid

- 4 Which of the following treatment cannot kill Q-fever pathogen ?
- (a) LTH-62.8°C
  - (b) HTST-71.8°
  - (c) UHT-135-150°C
  - (d) Boiling-100°C
- 5 The eyes(hole) in the "Swiss cheese" are made by inoculating \_\_\_\_\_
- (a) *Penicillin roqueforti*
  - (b) *Penicillin camemberti*
  - (c) *Propionibacterium spp.*
  - (d) *Saccharomyces cerevisiae*
- 6 The efficiency of pasteurization is measured using inactivation of \_\_\_\_\_ enzyme.
- (a) Catalase
  - (b) Lipase
  - (c) Phosphatase
  - (d) Oxidase
- 7 Canned food can be sterilized by \_\_\_\_\_
- (a) Radiation
  - (b) Temperature
  - (c) Osmotic pressure
  - (d) Filtration
- 8 Sausage are made from \_\_\_\_\_
- (a) Tomato
  - (b) Cabbage
  - (c) Dry Fish
  - (d) Ground Meat

- 9 \_\_\_\_\_ redox dye is useful to determine quality of milk.
- (a) Methyl red
  - (b) Crystal violet
  - (c) Resazurin
  - (d) Bromothymol blue
- 10 Mare's milk is used to make \_\_\_\_\_ (A fermented milk product)
- (a) Kefir
  - (b) Kummis
  - (c) Leban
  - (d) Yoghurt

### PART - B

Give the answer in short : (Any **five**)

10

- 1 What are Mycotoxins ? Give examples.
- 2 What is "Rennet" ? Give its use in dairy.
- 3 Name the causative agent of 'Q fever' & 'Brucellosis'.
- 4 Give the examples of Enforcement and food control agencies.
- 5 What is Purification & Rancidity ?
- 6 Give the examples of Milk borne diseases.
- 7 Mention the limitations of 'MPN' & 'SPC' methods.

## PART - C

Give the answer in brief : (any **four**) 12

- 1 Food and Milk borne infections.
- 2 What means by Probiotics, Prebiotics and Synbiotics ?
- 3 Fermented food products other than cheese.
- 4 Justify : Food is excellent substrate for microbial growth.
- 5 Sources of Milk contamination.

## PART - D

Write short notes on : (any **four**) 16

- 1 Phosphatase test.
- 2 Microbes as food.
- 3 Food poisoning.
- 4 HACCP system.
- 5 Cheese processing.

## PART - E

Give the answer in detail : (any **three**) 18

- 1 Microbial spoilage of food.
- 2 Fermented Milk products.
- 3 Methods of food preservation.
- 4 GMP in Food safety.