



GAY-413

Seat No. _____

B. Sc. (Sem. IV) Examination

March / April - 2017

Microbiology : MI-205

(Food & Dairy Microbiology)

Time : 3 Hours]

[Total Marks : 70

Instruction : All questions are compulsory.

1 Answer the following Multiple Choice questions : **10**

(1) Sauerkraut is prepared by fermentation of which of the following ?

- (A) Olives (B) Cabbage
(C) Cucumber (D) Milk

(2) Which of the following product can be used as a medicinal agent ?

- (A) Pasteurised Milk (B) Raw milk
(C) Acidophilus milk (D) Sterilized milk

(3) Which of the following is used in radiation treatment ?

- (A) Alpha rays (B) UV rays
(C) Gamma rays (D) Beta rays

(4) Which of the following is a type of food borne disease ?

- (A) Tuberculosis (B) Typhoid
(C) AIDS (D) Pneumonia

- (5) Which of the following is used in ripening of cheese ?
- (A) Trypsin (B) Casein
(C) Rennin (D) Lipase
- (6) Which of the following bacteria is responsible for spoilage canned food ?
- (A) *Halobacterium salinarum*
(B) *E.coli*
(C) *Pseudomonas sp.*
(D) *Clostridium sp.*
- (7) Grading of milk can be determined by _____ test.
- (A) MPN (B) SPC
(C) Resazurin (D) Phosphatase
- (8) Mycotoxins are produced by _____.
- (A) Algae (B) Fungi
(C) Virus (D) Bacteria
- (9) _____ is also known as Father of Canning.
- (A) Louis Pasteur (B) Nicholas Appert
(C) Robert Koch (D) Cesar Milstein
- (10) The oldest known procedure used for food preservation is _____.
- (A) Pasteurization (B) Salting
(C) Canning (D) Sterilization

2. Give the answer of the following short questions : 10
(any five)

- (1) Define : Botulism.
- (2) Enlist food borne diseases.
- (3) Define the term : Probiotics.
- (4) Name the microorganisms used in cheese production.
- (5) Enlist the methods used for microbiological examination of food.
- (6) Define : Starter culture.
- (7) Name the causative agents of Q fever and Listeriosis.
- (8) Explain the term : Spoilage.

3. Give the answer in brief of the following questions : 16
(any four)

- (1) Draw a brief account on GMP.
- (2) Discuss the total viable count.
- (3) Write a note on food borne intoxication.
- (4) Discuss phosphatase test.
- (5) Write a note on microbial flora of fresh foods.
- (6) Write a note on edible mushrooms.

4. Give the answer in brief of the following questions : 16
(any four)

- (1) Write about green olives and sausages as fermented foods.
- (2) Discuss MPN technique.
- (3) Discuss use of low temperature for food preservation.

- (4) Write a note on any two fermented dairy products.
 - (5) Write a note on Spirulina.
 - (6) Write a note on sources of contamination resulting in food and milk borne diseases.
- 5** Write short notes on the following questions : **18**
(any three)
- (1) Cheese, with reference to its types and processes involved in its production
 - (2) Food spoilage
 - (3) Food preservation methods
 - (4) Single Cell Protein
 - (5) Role of *Staphylococcus aureus*, *Salmonella typhi* and *Clostridium botulinum* in food poisoning.
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