

B.Sc. (CBCS) DEGREE EXAMINATION,  
NOVEMBER 2023

Sixth Semester

Microbiology – Core

FOOD MICROBIOLOGY

(For those who joined in July 2017–2019)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The greenish fluorescence by pyoverdin is produced by \_\_\_\_\_.  
(a) Staphylococcus  
(b) Shigella  
(c) Pseudomonas fluorescence  
(d) Sporo lactobacillus

7. In egg, red rots, caused by species of \_\_\_\_\_.  
(a) Sporotrichum (b) Serratia  
(c) Alcaligenes (d) Flavobacterium
8. Increase in concentration of carbon dioxide in the atmosphere of stored chicken inhibits the growth of \_\_\_\_\_.  
(a) Psychrotrops (b) Mesotrops  
(c) Thermophiles (d) Alkalophiles
9. Major human rickettsial diseases are \_\_\_\_\_ except.  
(a) Typhoid fever  
(b) Epidemic typhus  
(c) Rickettsial pox  
(d) Rocky mountain spotted fever
10. Trichinosis is caused by a \_\_\_\_\_.  
(a) Bacteria (b) Virus  
(c) Fungi (d) Nematode worm

2. Propionic acid produced by the propionibacteria in \_\_\_\_\_ cheese is inhibitory to mold.  
(a) Cheddar (b) Swiss  
(c) Brick (d) Roquefort
3. \_\_\_\_\_ is a bottom yeast.  
(a) Klwyveromyces  
(b) Hansenula  
(c) Candida  
(d) Saccharomyces Uvarum
4. Carcasses of animals may be contaminated with \_\_\_\_\_.  
(a) Mycobacterium (b) Pediococcus  
(c) Proteus (d) Salmonella
5. Microbial decomposition of foods can be prevented by \_\_\_\_\_.  
(a) Recontamination (b) Killing microbes  
(c) Scalding (d) None of them
6. Heat is used to \_\_\_\_\_.  
(a) Inactivate microbes  
(b) Inhibit growth of microbes  
(c) Kill microbes  
(d) Restrict the growth of microbes

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What are the factors affecting aw?  
Or  
(b) Write notes on the removal of microorganisms in food.
12. (a) Classify foods based on ease of spoilage.  
Or  
(b) Give the sources of microbes in air-contaminating food.
13. (a) Discuss the stages of fermentation of soy sauce.  
Or  
(b) Write notes on personal hygiene and health of employees.
14. (a) Discuss about contamination of grains.  
Or  
(b) Give the general types of microbial spoilage of fruits and vegetables.

15. (a) Write notes on Patulin.

Or

(b) What are the conditions necessary for the outbreak of Rickettsia food poisoning?

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss the role of the biological structures in the protection of foods against spoilage.

Or

(b) Discuss the important genera of bacteria in food microbiology.

17. (a) Discuss the role of water in the contamination of foods.

Or

(b) "Handling and Processing" is the important sources of food contamination. — Justify.

18. (a) Write a detail notes on organic acids and their salts in the preservation of foods.

Or

(b) Explain the pre treatment of plant material before the drying process.

19. (a) Write notes on the spoilage of meat under anaerobic conditions.

Or

(b) Write detailed notes on the sources of contamination of milk.

20. (a) Discuss food borne botulism in detail.

Or

(b) Discuss in detail about Trichinosis.

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