

(6 pages)

Reg. No. :

Code No.: 20229 E Sub. Code: SMMI 61

B.Sc.(CBCS) DEGREE EXAMINATION, APRIL 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. Most microorganisms grow best when the P^H is
(a) P^H 2-4 (b) P^H 4-6
(c) P^H 6-8 (d) P^H 8-10
2. Acetic acid and lactic acid are used for _____
(a) Curing meats
(b) Preservation of colour
(c) Preservation of pickles
(d) Preservation of fishes

9. The major carriers of Salmonellosis are
(a) Meat and eggs
(b) Meat and fish
(c) Eggs and fish
(d) Eggs and fruits
10. Aflatoxin is produced by
(a) *Aspergillus* sp
(b) *Fusarium* sp
(c) *Penicillium* sp
(d) *Rhizopus* sp

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Write note on oxidation reduction potential.
Or
(b) Describe the various principles of food preservation.

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3. Which of the following is not an intrinsic factor in food spoilage?
(a) P^H (b) Moisture content
(c) Available nutrients (d) Temperature
4. Spoilage of bread is caused by
(a) *Saccharomyces* (b) *Rhizopus*
(c) *Leuconostoc* (d) *Pseudomonas*
5. Pasteurization is a
(a) Low temperature treatment
(b) Streaming treatment
(c) High temperature treatment
(d) Low and high temperature treatment
6. _____ are the most heavily used additives
(a) Minerals (b) Vitamins
(c) Gums (d) Sweetners
7. Watery soft rot is found mostly in
(a) Fruits (b) Vegetables
(c) Cereals (d) All of the above
8. Black rots in eggs is most commonly caused by
(a) Species of *Proteus*
(b) Species of *Micrococcus* or *Bacillus*
(c) Molds or Yeasts
(d) All of the above

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12. (a) Write in brief about cross contamination during processing of food.
Or
(b) What are the main causes of quality deterioration and spoilage of food?
13. (a) Explain HACCP and its principles.
Or
(b) Briefly explain about various methods of food preservation.
14. (a) Explain how the fruits and vegetables are spoiled by molds.
Or
(b) Describe the microbiology of meat and meat products.
15. (a) List out the common food borne infections.
Or
(b) Differentiate between food infections and food intoxication.

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[P.T.O.]

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Write an essay on the importance of micro organisms in food microbiology.

Or

- (b) Explain how food preserved in anaerobic conditions.

17. (a) Write about contamination of food due to air.

Or

- (b) Explain how soil is act as a source of contamination of food.

18. (a) Write in brief about the preservation of foods by high and low temperature.

Or

- (b) Write in details about preservation by drying and radiation.

19. (a) Briefly explain contamination of milk and milk products.

Or

- (b) Describe about contamination and spoilage of eggs.

20. (a) Write in detail about the bacterial food borne illness.

Or

- (b) Discuss the role of the following in food borne infection

(i) Trichinosis

(ii) Viral hepatitis
