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## Code No.: 30229 E Sub. Code: SMMI 61

## B.Sc.(CBCS) DEGREE EXAMINATION, NOVEMBER 2022.

Sixth Semester

Microbiology - Core

## FOOD MICROBIOLOGY

(For those who joined in July 2017-2019)

Time: Three hours

Maximum: 75 marks

PART A —  $(10 \times 1 = 10 \text{ marks})$ 

Answer ALL questions.

Choose the correct answer:

- 1. Pseudomonas grows well in food containing
  - (a) Vitamins
- (b) Organic acids
- (c) antibiotics
- (d) nitrates

- 3. Actinomycetes are the normal flora of
  - (a) flour
- (b) cereals and snaks
- (c) frozen dough
- (d) raw cereal grains
- Kauffman white scheme identifies isolates of —————
  - (a) salmonella
- (b) clostridium
- (c) staphylococcus
- (d) none of the above
- Penicillium islandicum produces
  - (a) Citrinin
- (b) Sterigmatocystin
- (c) Luteoskyrin
- (d) Patulin

PART B —  $(5 \times 5 = 25 \text{ marks})$ 

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

11. (a) Write notes on inhibitory substances present in food?

Or

(b) How does the O-R potential of a food influence microbial growth?

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- The yellow-orange pigment of which genus causes discoloration on the surface of meat?
  - (a) Flarobacterium
- (b) Gluconobacter
- (c) Escherichia
- (d) Erwinia
- 3. An example of semiperishable food is
  - (a) potatoes
- (b) sugar
- (c) meat
- (d) eggs
- 4. Fats are hydrolysed by ----
  - (a) hydrolases
- (b) oxidases
- (c) microbial lipase
- (d) pectinases

eggs.

- 5. Piden is made from ———
  - (a) duck
- (b) chick
- (c) peacock
- (d) Turkey
- 6. A system to control the safety of a manufactured product is determined by
  - (a) HACCP
- (b) ISO 9000
- (c) CCP
- (d) FAO
- 7. Downy mildew is caused by species of
  - (a) Phytophthora
- (b) Bremia
- b) both (a) and (b) (d) Aspergillus

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12. (a) What are the sources of contamination of food?

Or

- (b) Discuss the role of animals in the contamination of food.
- 13. (a) Give the principles of food preservation?

Or

- (b) What is pasteurization? Write about its types?
- 14. (a) Write notes on the contamination of grains?

Or

- (b) Discuss about contamination of eggs?
- 15. (a) Give the structure of aflatoxin.

Or

(b) Discuss the role of Hepatitis in food borne outbreaks.

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## PART C — $(5 \times 8 = 40 \text{ marks})$

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

 (a) Write a detail notes on molds of importance in food industry.

O

- (b) Discuss about food as energy sources for microorganisms.
- (a) Describe the changes that occur in the nitrogenous content of food.

Or

- (b) Discuss in detail about contamination from green plant and fruits.
- 18. (a) Write a detail notes on HACCP?

Or

- (b) Write about low temperature preservation.
- 19. (a) Discuss the contamination of fruits and vegetables.

Or

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

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20. (a) Discuss salmonellosis in detail.

Or

(b) Describe the conditions necessary for the outbreak of staphylococcal food poisoning.

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