

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2024
(Fifth Semester)

Branch – MICROBIOLOGY

PRINCIPLES OF FOOD MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Which of the following techniques uses the method of reduction in water activity?
(i) Curing (ii) Emulsification
(iii) Blanching (iv) Radicidation
- 2 NaCl destroys microorganisms by the mechanism of _____.
(i) Plasmolysis (ii) Chelation
(iii) Heat shock (iv) Osmotic shock
- 3 Cottage is an example of _____ Cheese.
(i) Hard (ii) Semi hard
(iii) Soft (iv) Semi soft
- 4 Ochratoxin is basically a secondary metabolite of _____.
(i) Fungi (ii) Bacteria
(iii) Yeast (iv) Actinomycetes
- 5 Which of the following item is designated as AGMARK standard?
(i) Sea food (ii) Milk products
(iii) Cereals (iv) Spices

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Illustrate the mechanism water activity in food
OR
b Illustrate the concept of O-R Potential of food.
- 7 a State the principles of food preservation.
OR
b Write a note on chemical preservatives with examples
- 8 a Comment on the spoilage of Canned food products.
OR
b Outline the production of Cheese.
- 9 a Explain how Salmonella sp. brings about food poisoning.
OR
b Brief on Infant and wound Botulism.
- 10 a Brief on the concept of food standards.
OR
b Prioritize steps of good manufacturing practices.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 11 a Elaborate on the intrinsic factors effecting growth of microorganisms.
OR
b Elaborate on the extrinsic factors effecting growth of microorganisms.
- 12 a Describe low temperature as a means of preservation technique.
OR
b Discuss the steps involved in canning process.
- 13 a Outline the use of probiotics and their characters.
OR
b Explain the steps of Sauerkraut production.
- 14 a Give a detailed account on food poisoning associated Mycotoxins.
OR
b What is food-borne outbreak? Give a detail account on bacterial of food poisoning.
- 15 a Account on HACCP principles and state how is it important in quality measure.
OR
b Explain the biological treatment of waste water disposed from the industry.

Z-Z-Z END