

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022  
(First Semester)

Branch – APPLIED MICROBIOLOGY

FOOD AND DAIRY MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Pasteurization is -----.  
(i) low temperature treatment (ii) high temperature treatment  
(iii) steaming treatment (iv) low and high temperature
- 2 Which of the following statements are true regarding *Staphylococcus* food poisoning?  
(i) is an enterotoxin (ii) causes gastroenteritis  
(iii) produced by *Staphylococcus aureus* (iv) all of these
- 3 Salmonellosis involves -----.  
(i) An enterotoxin and exotoxin (ii) an enterotoxin and cytotoxin  
(iii) Exotoxin and cytotoxin (iv) cytotoxin only
- 4 Two types of fermentations are carried out for the production of -----.  
(i) pickle (ii) sausages  
(iii) yogurt (iv) vinegar
- 5 In which ISO standard used for food safety management in food industries?  
(i) ISO 26000 (ii) ISO 22000  
(iii) ISO 9001 (iv) ISO 14000

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a. List the food preservatives involved in food preservation.  
OR  
b. Explain the preservation by drying process.
- 7 a. Give some examples for mycotoxins. Explain.  
OR  
b. What is food borne infection? Give examples with mode of action.
- 8 a. Discuss the production of SCP with applications.  
OR  
b. Define probiotic, prebiotic, synbiotic and nutraceuticals.
- 9 a. Describe the process of various spoilage of milk.  
OR  
b. Illustrate the production of yoghurt with a neat flowchart.
- 10 a. List the food quality management principles.  
OR  
b. What is quality control and quality assurance in food industry?

Cont...

**SECTION -C (30 Marks)**  
Answer ALL questions  
ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. What TDT? How it is determined? Explain various heat treatments employed.  
OR  
b. List the various parameters affecting microorganisms in food.
- 12 a. What is food borne intoxication? Discuss with some examples.  
OR  
b. How food borne pathogens are detected? Explain with suitable techniques.
- 13 a. Explain the process of bread making with a neat flowchart.  
OR  
b. Describe the mushroom cultivation process with an example.
- 14 a. Illustrate the various steps in cheese production. Add a note on the starter culture and applications.  
OR  
b. Give a brief account on the production of dried milk products with flowchart.
- 15 a. What are the key benefits of ISO implementation in food safety and quality management system in food industries?  
OR  
b. Enlist the Seven Principles of Hazard Analysis and Critical Control Point (HACCP) System and explain it in brief.

Z-Z-Z

END