

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 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. The time temperature combination for HTST pasteurization of 71.1°C for 15 sec is selected on the basis of
 - a. *Coxiella burnetii*
 - b. *E.coli*
 - c. *B.subtilis*
 - d. *C.botulinum*
2. Which of the following toxin causing botulism is less toxic to human beings?
 - a. Type A
 - b. Type B
 - c. Type C
 - d. None of these
3. Probiotics are
 - a. Vitamin supplement
 - b. Synthetic nutraceuticals
 - c. Helpful bacteria
 - d. Digestive enzyme
4. Nonbacterial ropiness or sliminess in milk and milk products may be due to the
 - a. stringiness caused by mastitis and in particular by fibrin and leucocytes from the cow's blood.
 - b. sliminess resulting from the thickness of the cream
 - c. stringiness due to thin films of casein or lactalbumin during cooling
 - d. all of the above
5. Which of the following represents India in ISO?
 - a. PFRDA
 - b. FSSAI
 - c. BIS
 - d. BCCI

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a Demonstrate the principle of preservation and Explain the importance of high temperature in food preservation.
OR
b Discuss the characteristic features of food spoilage causing organisms in fermented foods.
- 7 a How will you detect the food spoilage causing organisms and elaborates its enumeration method with neat sketch.
OR
b Define Intoxication?. Explain the role of enterotoxin in Salmonellosis.
- 8 a Define Probiotics. Elaborate the characteristic features Probiotics microorganisms and its production.
OR
b State the industrial production of sauerkraut.
- 9 a Interpret the role of starter culture. Explain the defect and uses of yoghurt.
OR
b What is undesirable fermentation? Explain in detail.

Cont...

10 a State the principles of FFSAI in food safety and elaborate its food regulation and standards in food quality managements.

OR

b What are the steps followed in food quality assessment? Explain its risk assessments.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11 a Explain in detail about the factors affecting the growth of Microorganisms in food.

OR

b Explore the sources of food contaminants and its significant role in food spoilage.

12 a Classify the different types of Bacterial and fungal food borne diseases and its impacts on foods.

OR

b Classify the microbial toxins and its role in food poisoning, mechanisms and prevention and control of toxin contaminants.

13 a Define SCP? Explain the cultivation and preservation of Mushroom in detail.

OR

b Elaborate the Industrial production of cheese and fishery products.

14 a Encounter the source of contamination, Spoilage and preservation of milk and milk products.

OR

b Explain about Acidophilus milk products and their impact on human health.

15 a Explore briefly on food laws and regulations followed in India.

OR

b Expand HACCP and explain in detail about its regulations in food safety.

Z-Z-Z

END