22MBU520N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Fifth Semester)

Branch – **MICROBIOLOGY**

PRINCIPLES OF FOOD MICROBIOLOGY

Time: Three Hours | Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	What are the factors that contribute to microbial growth in food? a. ph b. Moisture c. Oxidation-reduction potential d. All the above	K1	CO1
	2	Water activity closely related to a. Relative humidity b. Moisture c. Water content d. Humidity	K2	CO1
2	3	Packaging of food is a method of a. Food adulteration b. Food preservation c. Food irradiation d. None of the above	K1	CO2
	4	What is the appropriate canning method for high-acid foods? a. Pressure canning b. Water bath canning c. Freezing d. Dehydration	K2	CO2
3	5	Kumis is a type of a. Fermented milk b. Ice cream c. Cheese d. Fermented soy product	K1	CO3
	6	A yellow colour in the creamy layer of milk may be caused by a. *Pseudomonas synchyanea* b. *Pseudomonas synxantha* c. *Serratia marcescens* d. None of these	K2	CO3
4	7	The major carrier of salmonellosis are a. Meat and eggs b. Meat and fish c. Meat and fruits d. Egg and fruits	K1	CO4
	8	Residues of aflatoxin M1 would be found in a. Dried fruits and nuts b. Cereals and grains c. Honey d. Milk and milk products	K2	CO4
5	9	The different ACC's between food categories reflect the a. Expected level of contamination of the raw materials b. Potential for microbial growth during storage c. Potential shelf life d. All of the above	K1	CO5
	10	Which of the following settles as a solid in the bottom during wastewater treatment? a. Sewage b. Sludge c. Litter d. All of the above	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Why microorganisms are important in food microbiology? Explain.	K3	CO1
		(OR)		
	11.b.	Compare the extrinsic and intrinsic factors influencing microbial growth in food.	K3	
2	12.a.	Enumerate the different chemical preservatives in food preservation.	K4	CO2
		(OR)		
	12.b.	Explain the various stages and importance of canning of foods.	K4	
3	13.a.	Give a detailed account on fermented vegetables.	K3	CO3
		(OR)		
	13.b.	List out the characteristics and applications of probiotics.	K4	
4	14.a.	Describe food borne diseases.	K3	CO4
		(OR)		
	14.b.	What is food poisoning? Write the general practices for preservation of by food poisoning.	K5	
5	15.a.	Give a brief note on Food Sanitation.	K3	CO5
		(OR)		
	15.b.	Illustrate Hazard Analysis and Critical Control Points (HACCP).	K5	

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain the factors affecting microbial growth in foods.	K4	CO1
2	17	Give a detailed account on methods and principles of food preservation by temperature.	K4	CO2
3	18	Write a brief note on oriental fermented foods.	K4	CO3
4	19	Give an account on food borne Salmonellosis.	K5	CO4
5	20	Examine a detailed study on food control agencies and their regulations.	K5	CO5

Z-Z-Z END