

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2025  
(Second Semester)

Branch - APPLIED MICROBIOLOGY

FOOD & DAIRY 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 is the full form of ERH? a) Equilibrium Redlich Heat b) Equilibrium Relative Heat c) Equilibrium Relative Humidity d) Equilibrium Redlich Humidity	K1	CO1
	2	The first FDA approved chemical preservative was _____. a) Sodium pyruvate      b) Lithium chloride c) Sodium Benzoate      d) Magnesium chloride	K2	CO1
2	3	Aflatoxins are produced by _____. a) <i>Penicillium</i> b) <i>Aspergillus</i> c) <i>Saccharomyces</i> d) <i>Rhizobium</i>	K1	CO2
	4	The diarrheal syndrome and the emetic syndrome are the characteristics of _____. a) Salmonellosis      b) Staphylococcal food poisoning c) <i>Perfringens</i> poisoning      d) <i>Bacillus cereus</i> food poisoning	K2	CO2
3	5	Kimchi is fermented _____. a) Carrots      b) Onions c) Cucumbers      d) Cabbage	K1	CO3
	6	Probiotics are used in the prevention of _____. a) Cardiac disease      b) Hypertension c) Digestive tract disease      d) Lungs infection	K2	CO3
4	7	Water kefir is also called _____. a) Matzoon      b) Shubat c) Tibicos      d) Boza	K1	CO4
	8	Which of the following is made with lactic acid bacteria? a) Wine      b) Bread c) Cider      d) Sauerkraut	K2	CO4
5	9	A _____ is a step at which a hazard can be controlled or eliminated. a) HAC      b) CCP      c) ACC      d) FCC	K1	CO5
	10	What is the full form of FDA? a) Fluorescein diacetate      b) Food and drug Administration c) Fluorine diacetate      d) Fluorescein diammonium	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.	Summarize the sources of contamination causing food spoilage.	K4	CO1
	(OR)			
	11.b.	Enroll the significant role of temperature in food preservation.		
2	12.a.	Highlight the bacterial food borne caused by <i>Clostridium perfringens</i> in detail.	K5	CO2
	(OR)			
	12.b.	Give a detailed account on to enumerate the microorganisms from food products with neat sketch.		
3	13.a.	Comment on cultivation and beneficial aspects of Spirulina in detail.	K4	CO3
	(OR)			
	13.b.	Demonstrate the industrial production of Vinegar with neat protocol.		
4	14.a.	Elaborate the microbiological spoilage and controlled measures of condensed milk.	K6	CO4
	(OR)			
	14.b.	Discuss the undesirable fermentation in dairy products and enroll the control measures in details.		
5	15.a.	Encounter the principles of food safety and quality in risk analysis.	K5	CO5
	(OR)			
	15.b.	Expand HACCP. What are the steps followed in food quality assessment? Explain its risk assessments.		

**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	Categorize the Interinsic, extrinsic factors and elaborate the significant role on food.	K4	CO1
2	17	Encounter the mechanism of microbial toxins in food poisoning with examples.	K5	CO2
3	18	Define Probiotics. Discuss the role of microorganisms in probiotic production and justify as functional foods.	K6	CO3
4	19	Distinguish the microbiological changes in milk and milk products.	K4	CO4
5	20	Point out the principles of FSSAI and Validate the role of FSSAI in food safety and quality management system.	K5	CO5

Z-Z-Z

END