

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION DECEMBER 2024
(First Semester)

Branch - FOOD TECHNOLOGY MANAGEMENT

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 is the basic definition of food preservation? a) The process of making food unhealthy b) The process of maintaining food in its original state c) The process of delaying food spoilage and decay d) The process of increasing food weight	K1	CO1
	2	Which preservation principle involves removing water from food to inhibit microbial growth? a) Dehydration b) Fermentation c) Canning d) Refrigeration	K2	CO1
2	3	Which of the following methods preserves food by converting sugars into alcohol and acids, inhibiting the growth of harmful bacteria? a) Dehydration b) Fermentation c) Freezing d) Canning	K1	CO2
	4	The type of fermentation observed in yeasts is a) acrylic fermentation b) lactic acid fermentation c) pyruvic fermentation d) alcoholic fermentation	K2	CO2
3	5	Isolation of pure culture refers to _____ a) purification of culture b) introduction of inoculum c) separation of a single colony d) to grow microorganisms on a surface	K1	CO3
	6	Which of the following is not a physical method for selection of pure culture? a) Heat treatment b) pH of the media c) Cell size and motility d) Use of dilute media	K2	CO3
4	7	Staphylococcus aureus was isolated by a) Rosenbach b) Louis Pasteur c) Passet d) Sir Alexander Ogston	K1	CO4
	8	Fungal disease in human is caused by _____ a) Inhalation of conidia b) Invasion of mucous membrane c) Contamination of wounds with conidia or mycelial fragments d) All of these	K2	CO4
5	9	What does the acronym FSMA stand for in the context of food safety regulation? a) Food Safety Monitoring Agency b) Food Safety Modernization Act c) Food Safety Management Assessment d) Food Safety Monitoring Accreditation	K1	CO5
	10	What is the purpose of food safety training for food handlers? a) To increase contamination risks b) To improve knowledge and practices related to food hygiene and safety c) To decrease awareness of hazards d) To ignore food safety protocols	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

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

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

Module No.	Question No.	Question	K Level	CO
1	11.a.	Identify the characteristics of microorganisms present in foods.	K3	CO1
	(OR)			
	11.b.	Select the factors affecting the spoilage of foods.		
2	12.a.	Construct the pathways involved in the fermentation of lactic acid bacteria.	K3	CO2
	(OR)			
	12.b.	Utilize on the microbes associated with fermented vegetables and meat.		
3	13.a.	List the methods used to assess microbial diversity in foods.	K4	CO3
	(OR)			
	13.b.	Classify the analytical methods of detection of microbial toxins.		
4	14.a.	Analyze on animal parasites that can trigger gastro-intestinal infections.	K4	CO4
	(OR)			
	14.b.	Classify bacterial diseases which are responsible to produce infections in human.		
5	15.a.	Explain the microbial indicators of food safety and quality of foods.	K5	CO5
	(OR)			
	15.b.	Interpret on the applications of hurdle technology for controlling microbial growth.		

SECTION - C (30 Marks)

Answer ANY THREE questions

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

Module No.	Question No.	Question	K Level	CO
1	16	Analyze on microorganisms involved in food spoilage.	K4	CO1
2	17	Examine on the strain selection for yeast fermentation of foods.	K4	CO2
3	18	Explain the culture dependent methods with its merits and demerits.	K5	CO3
4	19	Defend on the types of diseases occurred due to fungi with its risk factors. State on few preventive techniques.	K4	CO4
5	20	List on the ways of waste treatment and disposal of wastes.	K5	CO5

Z-Z-Z

END