

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION DECEMBER 2024
(Third Semester)**

Branch – **FOOD TECHNOLOGY MANAGEMENT**

FOOD PACKAGING TECHNOLOGY

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 does the primary purpose of food labeling? a) To advertise the product b) To provide nutritional information c) To ensure food safety d) To attract consumers	K1	CO1
	2	Show the type of packaging material commonly used for snack food. a) Glass b) Paper c) PET d) Aluminum foil	K2	CO1
2	3	What test measures a packaging material's ability to withstand punctures? a) Tensile strength test b) Tear-resistant test c) Puncture resistance test d) Burst strength test	K1	CO2
	4	Recall the test that detects the presence of microorganisms on packaging materials. a) Total viable count test b) Pathogen detection test c) Sterility test d) Sanitization test	K2	CO2
3	5	Select the packaging material used for packing yoghurt. a) Polyethylene b) Polypropylene c) Polyvinyl chloride d) Polystyrene	K1	CO3
	6	Show the type of plastic is commonly used for packaging meat products. a) Polyethylene b) Polypropylene c) Polyvinyl chloride d) Polystyrene	K2	CO3
4	7	Relate smart packaging is _____. a) Packaging with integrated sensors b) Packaging with RFID tags c) Packaging with barcode labels d) Packaging with QR codes	K2	CO4
	8	Which technology is used in smart packaging for inventory management? a) Radio frequency identification b) Near Field Communication c) Bluetooth low energy d) Wi-Fi	K1	CO4
5	9	Which component is responsible for sterilizing the packaging material? a) UV lamp b) Gamma radiation c) Hydrogen peroxide sterilizer d) Steam sterilizer	K1	CO5
	10	Show the type of vacuum packaging machine used for packaging large quantities of products. a) Chamber vacuum machine b) External vacuum machine c) Vacuum sealer d) Continuous vacuum machine	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.	Choose different forms of packaging materials used in food industry & explain its applications.	K3	CO1
		(OR)		
	11.b.	Identify and describe the characteristics of polymers used in food packaging.		
2	12.a.	Choose the appropriate testing Parameters for glass container and metal container to ensure safety and shelf – life of packaged foods.	K3	CO2
		(OR)		
	12.b.	Experiment with various methods used to assess the safety of food packaging materials.		
3	13.a.	Analyze the different packaging materials & techniques used for dairy products.	K4	CO3
		(OR)		
	13.b.	Assume the role of packaging material and specific requirements to retain the freshness of fruits & vegetables.		
4	14.a.	Elaborate the merits and demerits of active packaging.	K4	CO4
		(OR)		
	14.b.	Discuss the types of edible packaging film.		
5	15.a.	Explain the principle of a vacuum packaging machine.	K2	CO5
		(OR)		
	15.b.	Give a note on the application of the bottling machine in food industry.		

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 importance of food labeling and discuss the key information that must be included on food labels according to fssai regulations.	K4	CO1
2	17	Explain the factors influencing shelf-life evaluation of packaged foods and discuss the methods used to determine shelf life.	K5	CO2
3	18	Discuss various packaging materials for dairy products.	K4	CO3
4	19	Explain the process of retort pouch packing in detail and give a note on its application.	K5	CO4
5	20	Write a detailed note on the machine used for the modified atmosphere and shrink-packaging machines.	K4	CO5

Z-Z-Z

END