PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024

(Second Semester)

Branch - FOOD TECHNOLOGY MANAGEMENT

MAJOR ELECTIVE COURSE - I: NEW PRODUCT DEVELOPMENT

Maximum: 75 Marks Time: Three Hours

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks $(10 \times 1 = 10)$

Module No.	Question No.	Question	K Level	СО
1	1	Which of the following is NOT considered as a characteristic of new product? a. Compatability b. Complexity c. Observability d. Innovation	K1	COI
	2	Show the factor that primarily influences the speed of the product development process. a. Budget allocation b. Market demand c. Team expertise d. Regulatory requirements	K2	CO1
2	3	In pearson's uncertainity map, which quadrant represents high impact and high uncertainity? a. First Quadrant b. Third Quadrant c. Second Quadrant d. Fourth Quadrant	K1	CO2
	4	Which of the following is indirect method of shelf-life testing of food? a. Microbiological analysis b. Accelerated shelf-life testing c. Sensory evaluation by trained panel d. Oxygen permeability measurement of packaging materials	K2	CO2
3	5	What is the primary role of sensory evaluation specialist in product development? a. Conduct market research to identify consumer preference b. Assess physical and chemical properties of raw materials c. Evaluate sensory attributes of product through taste, smell, texture and appearance d. Analyse production cost and optimize manufacturing process	K1	CO
	6	Find the physical requirement that is essential to conduct shelf-life testing to assess stability and durability of product. a. Humidity control b. Temperature monitoring c. Light exposure d. Oxygen concentration	K2	CO
4	7	Which stage of prototype development involves creating a basic model to visualize the concept? a. Prototyping b. Analysis c. Testing d. Implementation	K1	СО
	8	Name the segmentation that focuses on dividing markets based on personality traits, values, attitudes, interest and lifestyle. a. Demographic segmentation b. Geographic segmentation c. Psychographic segmentation d. Behavioural segmentation	K2	СО
5	9	What does Halal certification indicate about a product? a. It is free from all types of preservatives. b. It complies with Islamic dietary laws c. It is produced using organic farming methods d. It contains only vegetarian ingredients	K1	СО
	10	Identify the first step in the process of setting up commercialisation. a. Securing funding B. Developing a prototype c. Market research & analysis d. Launching advertising campaigns	K2	СО

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	СО
	11.a.	Analyze the causes for food product success and failure.		
1		K4	COI	
	11.b.	Examine the role of consumer and organization in product development.	KT	COI
	12.a.	Plan robust innovation strategies that drive sustainable growth of organization.	4	
2	(OR)			CO2
	12.b.	Organize the steps to manage tension between the need for creativity and efficiency.		
	13.a.	Survey on the guidelines for sensory evaluation.		
3	(OR)			CO3
	13.b.	Discover on principles and applications in ASLT method of food shelf-life testing.	K4	203
	14.a.	Experiment with the ways to use digital marketing effectively in a food industry.		
4	(OR)			CO4
	14.b.	Apply IPR to protect and to encourage development of new products.		
	15.a.	Determine on FSSAI guideline for food safety and quality.		
5		K5	CO5	
	15.b.	Recommend on Trends and opportunities in developing innovative products.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	СО
1	16	List the principles and examine the stages in product development.	K4	CO1
2	17	Interpret on computer aided food product design and development Process.	K5	CO2
3	18	Discover chemical and microbial requirements for shelf-life testing of foods.	K4	CO3
4	19	Examine on network marketing and promotion.	K4	CO4
5	20	Explain the process and stages in a new product launch.	K5	CO5