

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

**MSc DEGREE EXAMINATION MAY 2025
(Second Semester)**

Branch – FOOD TECHNOLOGY MANAGEMENT

MAJOR ELECTIVE COURSE – I : NEW PRODUCT DEVELOPMENT

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	Which stage does the rapid sales growth and market share increases? a) Development stage b) Introduction stage c) Growth stage d) Maturity stage	K1	CO1
	2	Show the external key factor that affect the product development process. a) Market trend b) Company stage c) Organisational culture d) Technology and infrastructure	K2	CO1
2	3	Relate the main purpose of an innovation strategy in food product development. a) To increase production costs b) To ensure unique and competitive products c) To limit product variety d) To reduce consumer choices	K2	CO2
	4	NSI is expanded as _____ a) National System of Innovation b) National Innovation System c) National Science and Innovation System d) National Science and innovation technology	K1	CO2
3	5	Find the term which involves human analysis of the taste, smell, feel and appearance of food. a) Sensory evaluation b) Physical methods c) Chemical methods d) objective evaluation	K1	CO3
	6	Show which of the following physical changes is widely observed during shelf-life testing? a) Color change b) pH variation c) Microbial contamination d) Lipid oxidation	K2	CO3
4	7	What is the purpose of a Product Design Specification (PDS) in food product development? a) To define quality and safety standards b) To increase production speed c) To determine the best-selling price d) To finalize packaging color	K1	CO4
	8	Show the type of IPR protects inventions and technological advancements. a) Trademark b) Patent c) Copyright d) Geographical Indication	K2	CO4
5	9	What is the main goal of commercialization in food product development? a) Conducting laboratory research b) Scaling up production for the market c) Keeping the product at the prototype stage d) Avoiding consumer testing	K1	CO5
	10	Show which law governs food safety and standards in India? a) Prevention of Food Adulteration Act, 1954 b) Essential Commodities Act, 1955 c) Food Safety and Standards Act, 2006 d) Consumer Protection Act, 2019	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.	Explain the importance and objectives of new product development.	K2	CO1
	(OR)			
	11.b.	Summarize the stages of New product development.		
2	12.a.	Develop an innovation strategy in food product development.	K3	CO2
	(OR)			
	12.b.	Identify the computer aided food product design.		
3	13.a.	List the guidelines for sensory analysis.	K4	CO3
	(OR)			
	13.b.	Classify the methods used for shelf life testing.		
4	14.a.	Categorize the stages in prototype development.	K4	CO4
	(OR)			
	14.b.	Analyze the role of marketing in product development.		
5	15.a.	Illustrate on setting up commercialization of New products.	K3	CO5
	(OR)			
	15.b.	Suggest strategies for new product commercialization.		

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	List the factors affecting product development in detail.	K4	CO1
2	17	Discover the innovation and technology involved in national systems.	K4	CO2
3	18	Explain in detail about the need & importance of sensory evaluation in product development.	K5	CO3
4	19	Interpret the classification and significance of IPR.	K5	CO4
5	20	Discuss on the trends and opportunities in developing innovative products.	K6	CO5

Z-Z-Z

END