

2024

NEW FOOD PRODUCT DEVELOPMENT*Full Marks: 100*

Time: Three hours

*The figures in the margin indicate full marks for the questions.**Answer **any five** questions.*

1.	a)	Elaborate on six levels of food product innovation with an example for each.	18
	b)	What is “market”, and what is “market place”?	2
2.	a)	Describe the importance and contribution of the following NFPD team members. (i) Team leader / management, (ii) Engineer, (iii) Production professionals, (iv) Finance professionals, (v) Legal experts, and (vi) R&D experts.	12
	b)	Explain common conflict between R&D professionals and marketing professionals in an NFPD team. Elaborate on the internal sources of food product idea generation within the food manufacturing company.	3+5
3.	a)	What is “shelf-life” of a food? Give a detail description on major quality analyses necessary for shelf-life testing of fresh fruits and vegetables?	2+10
	b)	Describe the three major categories of NFPD project costs with appropriate examples: (i) Development costs, (ii) Production costs, and (iii) Marketing, launch and sales costs	8
4.	a)	What is life-span of a new food product? Graphically explain the (i) Introduction, (ii) Growth, (iii) Maturity and (iv) Decline stages of a new food product life.	10
	b)	What are “stage” and “gate” in a stage-gate process? Describe various major components of a “stage” and a “gate” in the process.	2+8
5.	a)	What is “competitive intelligence”? Elaborate on the following five sources of competitive intelligence: (i) Media reports, (ii) Corporate publications, (iii) Research publications, (iv) Food expos and trade fairs, (v) Government documents	2+10
	c)	List four major objectives of new food product development. Briefly elaborate on how post-launch sales figures are analyzed	4+4
6	a)	Describe the business project development stage of a stage-gate process detailing the inputs and outputs. What are the four (4) major conditions to take a “go ahead” decision at the “gate”.	6+4
	b)	What are “product traceability”, “product recall” and “product withdrawal”? Describe how a new food product idea can be screened on the basis of marketability, technical feasibility, manufacturing capability, and financial health.	3+7