

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SIXTH SEMESTER B.TECH DEGREE EXAMINATION (R), MAY 2023

FOOD TECHNOLOGY

(2020 SCHEME)

Course Code : 20FTT322

Course Name: Food Product Design and Development

Max. Marks : 100

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

1. Define innovation. How do you recognize innovation from invention?
2. What are the factors for success of a newly developed food product?
3. What do you understand by (i) Product Life Cycle (ii) Product Commercialization?
4. Explain the term product launch and evaluation.
5. How do environment and individual affect food choice?
6. Enlist various attributes for evaluating product development.
7. Comment on the flexibilities in the development of a particular food product.
8. Discuss briefly the people involved in product development. What are their specific roles?
9. How would you determine the shelf life of a product?
10. What are the key criteria to be used in preparing the product development portfolio?

PART B

(Answer one full question from each module, each question carries 14 marks)

MODULE I

11. a) What are the factors for success of a food product? (7)
- b) Briefly explain the innovation strategy to be considered for the design and development of a food product. (7)

OR

12. a) Describe market survey process for product development. (7)
- b) Discuss in detail, the market segments and consumer segmentation for food products. (7)

MODULE II

13. Describe in detail, different techniques used in sensory evaluation. (14)

OR

14. a) Explain the stages of product development process. (8)
b) Explain the knowledge required for the selection and conversion of raw materials in food product development. (6)

MODULE III

15. a) How do you integrate consumer needs and product attributes in the food behavior process? (8)
b) What are the factors responsible for the food choice of consumers? (6)

OR

16. a) Discuss the role of consumer in the food product development by citing suitable examples. (8)
b) How do aesthetics and visual appeal affect enjoyment of food? (6)

MODULE IV

17. a) Discuss the basic philosophy of product development management. (7)
b) Elaborate the details to be followed in setting the budget for the development of a new product. (7)

OR

18. a) Explain the steps to be followed for managing and organizing the product development process. (7)
b) Discuss different levels of product development management? (7)

MODULE V

19. a) Discuss the ways you could measure product development effectiveness and efficiency. (7)
b) What are the major criteria for evaluating a particular food product? (7)

OR

20. a) Explain benchmarking? What are the basic steps for benchmarking product development? (8)
b) Discuss the emerging trends in food product development in India. (6)
