

Register No.: ..... Name: .....

**SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)**

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

**SIXTH SEMESTER B.TECH DEGREE EXAMINATION (R,S), MAY 2024****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. Give a short note on product attributes.
2. Outline the key factors for success of a newly developed product.
3. Define steps in product launch and evaluation.
4. Write a short note on prototype development.
5. List out the factors affecting consumer preference for food products.
6. Summarize the role of research and development in new product development.
7. What do you mean by market positioning?
8. Give an account of product scale up.
9. What are the important factors which contributes to the success of a product?
10. Mention the factors affecting shelf life of food product.

**PART B*****(Answer one full question from each module, each question carries 14 marks)*****MODULE I**

11. a) Explain the importance of team work in managing product development process (6)
- b) Elaborate the various aspects of product life cycle that are to be considered in product development. (8)

**OR**

12. a) Identify the outcomes that are expected from the bottom level to top level management to bring out a successful product development programme. (10)
- b) Indicate about the different barriers which can be expected in the process of food product development (4)

**MODULE II**

13. Summarize the product development process with respect to basic and necessary activities in every stage of the process for an efficient new product development. (14)

**OR**

14. a) Discuss the different types of technological knowledge involved in new food product development with illustrations. (8)
- b) Give an account of ingredients and novel processing technologies in defining food product attributes? (6)

**MODULE III**

15. a) Describe the concept of integrating consumer needs in product development research (7)
- b) Explain the areas of consumer behavior that should be studied for developing new food products. (7)

**OR**

16. Consumer behavior is a key aspect of understanding the purchase decision – Critically analyze the factors affecting consumer behavior. (14)

**MODULE IV**

17. Team development creates a captivating atmosphere by encouraging cooperation, team work, interdependence and by building trust among team members. Comment and discuss the role of team for a new product development. (14)

**OR**

18. Discuss on the following (8)
- i. Role of Product Development Team Manager (6)
- ii. Importance of team work in product development process

**MODULE V**

19. Give the importance of sensory evaluation in product development. Elaborate the methods and application of discriminative and ranking tests. (14)

**OR**

20. a) Interpret the significance of bench marking in food product design and development. (6)
- b) Discuss the steps that need to be followed to maximize the return on any investment in benchmarking. (8)

\*\*\*\*\*