

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

## **SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)**

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

**FIFTH SEMESTER B.TECH DEGREE EXAMINATION (Regular), DECEMBER 2022**

**(2020 SCHEME)**

**Course Code : 20FTT385**

**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 new food product in company and consumer perspectives.
2. Recall the new product categories based on the level of innovation.
3. State the four areas where knowledge is needed for product development.
4. Write the important areas of disembodied knowledge.
5. Explain consumer behaviour with examples.
6. Classify consumers in relation to new products.
7. Explain the two outcomes of product development processes required by the top-level management.
8. Explain the important factors in management levels for successful product development.
9. Give the importance of sensory characteristics in food quality.
10. Categorize companies based on product development programme profitability and programme impact on the company.

### **PART B**

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

#### **MODULE I**

11. Discuss the product categories of food products that could be vital in developing new product ideas. (14)

**OR**

12. Illustrate the four stages of product development process with an emphasis on stage gates and interrelationships (14)

#### **MODULE II**

13. Describe the types of knowledge required for development of new food product. (14)

**OR**

14. Discuss the various sensory evaluation methods used to characterise sensory attributes of food materials. (14)

**MODULE III**

15. Discuss the general consumer behaviour that should be understood for new food product development. (14)

**OR**

16. Identify the importance of total product concept and diffusion of new products in consumer avoidance and acceptance (14)

**MODULE IV**

17. Elaborate the fundamental principles of food product development management. (14)

**OR**

18. Discuss the responsibilities and decisions of people involved in product development management from different managerial levels. (14)

**MODULE V**

19. Describe benchmarking, the processes involved and its importance in improving product development process. (14)

**OR**

20. Discuss the various shelf-life evaluation methods used to understand stability of food materials. (14)

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