

B.Sc. FOOD SCIENCE & TECHNOLOGY
FOURTH SEMESTER
FOOD PRODUCT DEVELOPMENT
BFST-404
[USE OMR SHEET FOR OBJECTIVE PART]

SET
B

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

(Objective)

Choose the correct answer from the following:

1 × 20 = 20

- Which type of packaging material can be safely consumed along with the food?
 - Biodegradable packaging
 - Intelligent packaging
 - Edible packaging
 - Active packaging
- What is the key advantage of frozen foods?
 - They are healthy
 - They are preservative-free
 - They are easy to cook
 - They are made from fresh ingredients
- Which food processing technology uses ultraviolet (UV) treatment to kill microorganisms?
 - Freeze drying
 - Membrane filtration
 - Pulsed electric field (PEF) treatment
 - Irradiation
- Which of the following is not a major factor influencing the Food Product Development?
 - Creativity
 - Age of customers
 - Colour of the product
 - Market trends
- Which factor refers to the impact of friends, family, and online communities on consumer behavior?
 - Social influence
 - Psychological factors
 - Economic factors
 - Political factors
- Preference mapping is a useful tool for companies to:
 - Understand consumer preferences for sensory attributes
 - Develop marketing campaigns
 - Determine pricing strategies
 - Conduct market research
- What did the Food and Drug Administration require Frito Lay to do regarding "WOW Chips"?
 - Reduce the price of the chips
 - Increase the availability of the chips
 - Change the packaging of the chips
 - Add warning labels to the chips
- Which aspect of the Indian market is emphasized in the innovation strategy?
 - Affordability
 - Sustainability
 - Convenience
 - All of the above
- What is the first step in the innovation strategy for developing new food products in India?
 - Incorporating local flavors
 - Understanding consumer needs
 - Collaboration and co-creation
 - None of the above

10. Which of the following is not a benefit of influencer marketing?
 - a. Access to new audiences
 - b. Increased brand awareness
 - c. Higher engagement with target audience
 - d. Improved search engine rankings
11. What is an example of active packaging?
 - a. Packaging with oxygen scavengers
 - b. Packaging with temperature sensors
 - c. Packaging made from plant-based materials
 - d. Packaging with sensors and indicators
12. What is Tata Salt Lite fortified with?
 - a. Essential amino acids
 - b. Iodine and iron
 - c. Vitamins and minerals
 - d. None of the above
13. Which food processing technology involves the removal of water through sublimation?
 - a. Freeze drying
 - b. Pulsed electric field (PEF) treatment
 - c. Microwave-assisted thermal sterilization (MATS)
 - d. Ultraviolet (UV) treatment
14. In the process of product development, which step follows screening of ideas?
 - a. Idea Generation
 - b. Feasibility
 - c. Financial
 - d. All of these
15. Which food processing technology is being used in India to sterilize food products, including fruits, vegetables, and meat?
 - a. HPP
 - b. Nanotechnology
 - c. UV treatment
 - d. MATS
16. Which form of promotion involves partnering with other businesses or individuals to promote products or services and paying them a commission for each sale or lead generated?
 - a. Mobile marketing
 - b. Affiliate marketing
 - c. Influencer marketing
 - d. Content marketing
17. Which sensory attribute refers to the physical characteristics of the product, such as crispness and chewiness?
 - a. Appearance
 - b. Texture
 - c. Aroma
 - d. Taste
18. Which ministry does FSSAI work under?
 - a. Ministry of Health and Family Welfare
 - b. Ministry of Food Processing Industries
 - c. Ministry of Agriculture
 - d. Ministry of Consumer Affairs
19. Sensory attributes in preference mapping include all of the following EXCEPT:
 - a. Aroma
 - b. Texture
 - c. Price
 - d. Taste
20. How is vacuum frying being used in India?
 - a. To increase oil absorption in fried foods
 - b. To produce unhealthy snacks
 - c. To decrease oil absorption in fried foods
 - d. To decrease the shelf life of snacks

(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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| 1. Draw and explain the process with the help of a flow-chart for a new product development. | 10 |
| 2. Suggest some marketing strategies for local tea shop owners to maximize their business. | 10 |
| 3. Describe all the rules and regulations set by FSSAI for labelling of a food product. | 10 |
| 4. Explain the various types of business models and discuss their importance. | 10 |
| 5. List the aspects that can influence a consumer's mindset towards a new product. | 10 |
| 6. Write a short note on <i>any two</i> of the following analyses performed on new food product:
a) Sensory Evaluation
b) Nutritional Analysis
c) Physical and Chemical analysis | 2×5=10 |
| 7. Define preference mapping. Explain various steps involved in the process. | 10 |
| 8. What are the key factors for a new products success? | 10 |

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