



17048



LIBRARY
Brainware University
Barasat, Kolkata -700125

BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(FND)-Hons-2022

Course Name – Food Processing and Technology

Course Code - BFNC601

(Semester VI)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

(i) Identify the main type of spoilage that occurs in cereals and cereal products.

- | | |
|-----------------------|-------------------|
| a) Bacterial spoilage | b) Yeast spoilage |
| c) Fungal spoilage | d) Viral spoilage |

(ii) A batch of canned beans develops bulging lids. What should be suspected?

- | | |
|-------------------------|---------------------------------|
| a) Fungal contamination | b) Clostridium botulinum growth |
| c) Nutrient deficiency | d) Oxygen leakage |

(iii) Identify the main pigment responsible for the red color in tomatoes.

- | | |
|----------------|----------------|
| a) Anthocyanin | b) Chlorophyll |
| c) Lycopene | d) Flavonoids |

(iv) What is the minimum sugar content required for a product to be labeled as jam?

- | | |
|--------|--------|
| a) 0.3 | b) 0.5 |
| c) 0.6 | d) 0.7 |

(v) Name the primary ingredient that gives pickles their sour taste.

- | | |
|-----------|----------------|
| a) Salt | b) Acetic acid |
| c) Pectin | d) Sugar |

(vi) A fruit juice turns brown after extraction. Which enzyme is responsible?

- | | |
|--------------|-----------------------|
| a) Amylase | b) Polyphenol oxidase |
| c) Invertase | d) Protease |

(vii) Which of the following is the main reason for adding salt to bread dough?

- | | |
|--------------------------|-----------------------------------|
| a) To improve flavor | b) To enhance color |
| c) To increase sweetness | d) To speed up the rising process |

(viii) What is the objective of adding sugar in the preparation of biscuits and cookies?

- | | |
|-----------------------------------|--|
| a) To help the dough rise | b) To provide sweetness and contribute to browning |
| c) To make the dough more elastic | d) To improve the shelf life of the products |

- (ix) How would you modify the preparation of a cookie recipe to make it more suitable for individuals with gluten intolerance?
- Use wheat flour in smaller quantities
 - Replace wheat flour with gluten-free flour like rice flour or almond flour
 - Increase the sugar content to balance the taste
 - Use more butter to enhance the texture
- (x) Which certification is used to ensure that agricultural products meet national standards for quality?
- FSSAI
 - ISI
 - Agmark
 - MPO
- (xi) What is the main purpose of Agmark certification?
- To ensure the safety of processed food
 - To promote organic food products
 - To guarantee quality standards in agricultural products
 - To monitor the manufacturing process of packaged foods
- (xii) What does the FPO (Fruit Products Order) regulate?
- The pricing of fruit products
 - The quality and hygiene standards of fruit products
 - The packaging of fruit products
 - The export of fruit products
- (xiii) How can a consumer ensure they are purchasing food products that meet quality standards?
- By checking for FSSAI and ISI certifications on the packaging
 - By checking if the food has the lowest price
 - By trusting all food brands equally
 - By selecting food items based on the product's color and texture
- (xiv) Which of the following is a common adulterant found in milk?
- Starch
 - Lead oxide
 - Argemone seeds
 - Copper sulfate
- (xv) What is the primary reason for food adulteration?
- To enhance food quality
 - To improve food safety
 - To increase profit margin
 - To meet international food standards

Group-B
(Short Answer Type Questions)

3 x 5=15

- Explain how spoilage occurs in fruits and vegetables and name the common spoilage organisms. (3)
- Illustrate the role of shelf life in determining food quality and safety. (3)
- Classify the major natural pigments found in fruits and vegetables and discuss their significance in food processing. (3)
- Discuss the importance of fermentation in bread-making. (3)
- Compare HACCP and FSSAI in terms of their role in food safety regulation. (3)

OR

- Analyze how HACCP principles can be applied to identify and prevent hazards in their production process. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

- Evaluate the role of barcodes in supply chain management and how they improve efficiency in food distribution. (5)
- What are the key principles of the Food Products Order (FPO) and how does it regulate the production and sale of fruit and vegetable products? (5)

9. Explain the compositional differences between jams, jellies, and marmalades, and how they affect texture and spreadability. (5)
10. Assess the effectiveness of fermentation as a preservation technique in extending the shelf life of food. (5)
11. Explain how freezing, drying, and irradiation help in controlling food spoilage. (5)
12. Examine how the use of color in food packaging influences consumer purchasing decisions and product perception. (5)

OR

Analyse the role of FSSAI in monitoring and controlling food adulteration and how these organizations protect consumers. (5)

LIBRARY
Brainware University
Barasat, Kolkata -700125
