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**BRAINWARE UNIVERSITY****Term End Examination 2025-2026****Programme – B.Sc.(BT)-Hons-2023/B.Sc.(BT)-Hons-2024/B.Sc.(BT)-Hons-2025****Course Name – Food Technology****Course Code - BBT10002****(Semester I)**

Library
Brainware University
398, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

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) Write the sentence that is true with respect to food preservation.
- | | |
|---|--|
| a) The mechanical abuse that food has received during storage/distribution does not affects its storage stability | b) Each food type has a potential storage life |
| c) All of the mentioned | d) None of the mentioned |
- (ii) The enzyme which breaks down carbohydrate is ____ .
- | | |
|------------|----------------------|
| a) Lipase | b) Protenase |
| c) Amylase | d) None of the these |
- (iii) Choose the primary objective of the Food Safety & Standards Act, 2006.
- | | |
|---|--|
| a) To promote the export of Indian food products | b) To regulate the pharmaceutical industry. |
| c) To ensure the availability of safe and wholesome food for human consumption. | d) To encourage the production of organic food |
- (iv) Choose the primary purpose of licensing and registration requirements for food businesses under the FSSAI Act.
- | | |
|---|---|
| a) To ensure that food businesses adhere to safety and quality norms. | b) To increase government revenue through licensing fees. |
| c) To create unnecessary bureaucracy. | d) To limit the number of food businesses in operation. |
- (v) Choose from the following that is NOT within the purview of the Food Safety & Standards Act, 2006.
- | | |
|---|-----------------------------|
| a) Setting food standards | b) Regulating food labeling |
| c) Regulating the sale of alcoholic beverages | d) Monitoring food imports |
- (vi) Choose from the following the food preservation method that relies on the removal of moisture from food to prevent bacterial growth?
- | | |
|-------------|-----------------|
| a) Pickling | b) Fermentation |
|-------------|-----------------|

- c) Dehydration
d) Freezing
- (vii) Select the preservation method where the food is soaked in a solution of vinegar or brine to create an acidic environment
- a) Syruping
b) Pickling
c) Fermentation
d) MAP
- (viii) Chilling and freezing contribute to food preservation
- a) By slowing down microbial growth and enzymatic activity
b) By removing water from food
c) By creating an acidic environment
d) By eliminating oxygen
- (ix) Which of the following is a complex carbohydrate found in plants?
- a) Glucose
b) Fructose
c) Cellulose
d) Lactose
- (x) Identify the type of protein help in chemical reactions in the body?
- a) Structural proteins
b) Enzymes
c) Transport proteins
d) Storage proteins
- (xi) Hemoglobin, responsible for carrying oxygen in the blood, is an example of ____ of protein.
- a) Primary structure
b) Secondary structure
c) Tertiary structure
d) Quaternary structure
- (xii) Identify the type of lipid which is the major component of cell membranes?
- a) Triglycerides
b) Phospholipids
c) Steroids
d) Waxes
- (xiii) Choose the government agency is responsible for setting and enforcing food purity standards in the United States?
- a) FDA
b) USDA
c) CDC
d) EPA
- (xiv) Select the purpose of HACCP (Hazard Analysis and Critical Control Points) in the food industry.
- a) Ensure food purity and safety
b) Improve food taste
c) Reduce food production cost
d) Enhance food presentation
- (xv) Identify disaccharide among the following.
- a) Glucose
b) Fructose
c) Sucrose
d) Galactose

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain the importance of hop additions during the brewing process. (3)
3. Recognize the three main categories of food constituents. (3)
4. Explain why roughage is very important part in our dietary system (3)
5. List three examples of food additives used in the food industry and their purpose. (3)
6. Summarize the different types of bacteriocin in food preservation (3)

OR

Summarize the roles of O₃ & H₂O₂ as food sanitisers (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Distinguish between prebiotics and probiotics, highlighting their definitions, functions, and sources. Provide at least two examples of each to illustrate your points. (5)
8. Differentiate between essential and non-essential amino acid with examples. (5)
9. Describe the methods used as "Standards of Identity" for the analysis of wheat flour. (5)

10. State the functions of following water-soluble vitamins such as Vitamin C, B2, B6 and explain the consequences of their deficiencies or excess intake. (5)
11. Write the benefits and impacts of technical cooperation programs for Food Safety in India (5)
12. Given a scenario, explain which food preservation method (dehydration, pasteurization, sterilization, etc.) would be most suitable and justify your choice. (5)

OR

Compare and contrast pasteurization and sterilization as methods of food preservation. (5)
Highlight their respective advantages and limitations

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