



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(FND)-Hons-2022

Course Name – Food Borne Disease and Toxicology

Course Code - BFNS301

(Semester III)

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) What is the most common symptom of foodborne illnesses?
- a) Sneezing
b) Nausea and vomiting
c) Itchy skin
d) Dry mouth
- (ii) What is contamination in the context of food safety?
- a) The process of removing harmful substances from food
b) The introduction of harmful substances into food, making it unsafe to consume
c) The preservation of food using chemicals
d) The cooking process that enhances the flavor of food
- (iii) Which of the following best defines decontamination?
- a) Adding preservatives to food to extend its shelf life
b) Washing hands before cooking
c) Removing physical dirt from surfaces
d) Removing or neutralizing harmful substances to make something safe for use
- (iv) What is HACCP, a systematic approach used in food safety?
- a) Hazardous Allergen Control and Chemical Prevention
b) Hazard Analysis and Critical Control Points
c) Hygiene Assessment and Compliance Control Program
d) Health and Culinary Control Protocol
- (v) What does \"cross-contamination\" refer to in food safety?
- a) Mixing different types of food together
b) The spread of harmful microorganisms from one surface or food to another
c) The practice of sharing food between individuals
d) Cooking food at extremely high temperatures
- (vi) Which of the following is a physical method used to control food contamination?
- a) Antibiotics
b) Refrigeration
c) Food additives
d) Pesticides
- (vii) What is lactose intolerance?

- a) An allergy to milk
c) A preference for lactose-free foods
- b) Inability to digest lactose
d) A type of dairy intolerance
- (viii) Which sugar is responsible for lactose intolerance?
a) Sucrose
c) Fructose
- b) Lactose
d) Glucose
- (ix) What is the difference between sanitation and disinfection in food processing?
a) Sanitation refers to cleaning, while disinfection involves removing all microorganisms.
c) Sanitation involves reducing contaminants, while disinfection involves cleaning surfaces.
- b) Sanitation and disinfection are the same concepts.
d) Sanitation is used for utensils, and disinfection is used for food.
- (x) Which enzyme is deficient or insufficient in individuals with lactose intolerance?
a) Lipase
c) Lactase
- b) Pepsin
d) Amylase
- (xi) Which of the following is a common food preservative that prevents spoilage by reducing moisture content?
a) Salt (sodium chloride)
c) Vinegar (acetic acid)
- b) Sugar (sucrose)
d) Lemon juice (citric acid)
- (xii) What is the primary causative agent of botulism?
a) Salmonella
c) E. coli
- b) Clostridium botulinum
d) Staphylococcus aureus
- (xiii) Conotoxins are venomous peptides produced by:
a) Cone snails
c) Cone jellyfish
- b) Cone spiders
d) Cone starfish
- (xiv) Solanine is a toxic alkaloid found in which plant family?
a) Nightshades
c) Sunflowers
- b) Roses
d) Orchids
- (xv) What is a foodborne disease?
a) Waterborne illness
c) Disease from contaminated food
- b) Airborne infection
d) Insect-transmitted disease

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Define Hazard (3)
3. Explain the difference between "lactose intolerance" and "milk allergy" (3)
4. Explain the cause of the disease named- lathyrism. (3)
5. (3)
Define "Infection" and "Infectious Disease".
6. Justify the sentence – "Packaging and storage best practices". (3)

OR

Explain "risk-analysis".

(3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Describe the nutritional management of lactose-intolerance with calcium and vitamin-D considerations. (5)
 8. List down the types of hazards. (5)
 9. Describe the food-borne diseases caused by "Clostridium perfringens" and "Bacillus cereus". (5)
 10. Explain the concept of food safety. (5)
 11. Compare "Saxotoxin" and "Conotoxin". (5)
 12. Report one real-world examples of HACCP implementation and its benefits in the food industry (5)
- OR**
- Propose how to balance "food safety" and "consumer preferences". (5)
