



KERALA AGRICULTURAL UNIVERSITY  
B. Tech.(Food Technology) 2023 & Previous Admission  
VI Semester Final Examination – June 2026

Pafe 3235

Food Quality, Safety Standards and Certification (2+0)

Marks: 50  
Time: 2 hours

**I Fill in the blanks (10x1=10)**

1. The number of steps involved in HACCP plan implementation in a food manufacturing line are .....

**Answer the following**

2. What is a "physical hazard" in a food?

**State True or False**

3. "Curcumin" is a not a natural food colorant.

**Choose the correct answer**

4. HACCP was invented by –

- (a) DRDO
- (b) NASA
- (c) ISRO
- (d) All of them

5. Which one of the following is a difference test in sensory analysis of food?

- (a) Duo-trio
- (b) Flavor profile
- (c) Texture profile
- (d) Hedonic scale

6. Which one of the following is a common physical hazard in milled rice?

- (a) Metal piece
- (b) Aflatoxin
- (c) Broken grains
- (d) All of these

7. Which one of the following food's auditory sensory quality is immensely important to consumers?

- (a) Fruit juice
- (b) Milk
- (c) Jam
- (d) Potato chip

8. Which one of the following is a common biological hazard in fish?

- (a) Aflatoxin
- (b) Shiga toxin
- (c) Botulinum toxin
- (d) None of these

9. Which one of the following is a common chemical hazard in fruit juice?

- (a) Terpenoids
- (b) Fertilizer residue
- (c) Alkaloids
- (d) All of these

10. Which of the following foods commonly suffer from enzymatic defects?

- (a) Jelly
- (b) Ice-cream
- (c) Biscuit
- (d) Cut fruits

- II Write short notes on ANY FIVE of the following (5x2=10)**
1. What is the major difference between "quality control" and "quality assurance"?
  2. What is foodborne outbreak? Give an example.
  3. What is "critical limit" in case of a HACCP plan – give an example.
  4. What is the full name of the food safety organization "GFSI"? What is its primary function?
  5. What is the major difference between "cleaning" and "sanitization" in a food industry?
  6. What is a "differential" microbiological culture media?
  7. Name a Gram positive and a Gram negative pathogen commonly associated with contaminated food.

- III Answer ANY FIVE of the following (5x4=20)**
1. Describe the working principle of Munsell color system.
  2. What are physical, chemical and biological hazards in a food? Define with an example for each.
  3. Briefly elaborate on "Stationary" phase and "Death" phases of microbial growth.
  4. Enlist any four major GMP requirements for walls, floors, windows and doors of a food manufacturing facility.
  5. Elaborate on assembling a HACCP team for a food manufacturing line.
  6. Briefly discuss personnel hygiene facilities in a food manufacturing unit, according to the cGMP requirements.
  7. What are the three major purposes of "monitoring procedure" in HACCP plan for a food manufacturing line?

- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Give a process flow-diagram of a fruit juice processing line, and describe the decision tree to determine the processing step "pasteurization" as a critical control point.
  2. Elaborate on
    - (i) flavor profile method and
    - (ii) texture profile method in descriptive sensory analysis.

\*\*\*\*\*