

Roll No.

2022
2nd Sem

M.Tech Food Technology
Semester II Examination, 2022
Paper Title: Food Safety and Quality Management
Paper Code: MFTC – 203

Time: 3 Hours

Max Marks 75

Time Allotted: 3 hours

Attempt all questions. Marks are mentioned against each question.

1. Answer the following (1 x 15)

A. Fill in the blanks:

- (a) TBT stands for_____.
- (b) _____ taste test strips are used for identifying supertasters.
- (c) _____ is a taste modifying protein isolated from miracle fruit.
- (d) _____ is the inability to perceive taste.
- (e) _____ is the amount of the substance required (usually per body weight) to kill 50% of the test population.

B. State true or false:

- (f) The triangle test is a discriminative method with many uses in sensory science including: gauging if an overall difference is present between two products, selecting qualified panelists for a particular test.
- (g) The science of smell is termed as olfaction.
- (h) The identification of biological, chemical, and physical agents capable of causing adverse health effects and which may be present in a particular food or group of foods is termed as hazard identification.
- (i) ISO stands for International Standards Organization.
- (j) ASTM has given guidelines for selection and training of sensory panel members.

C. Briefly define the following (one sentence):

- (k) Taste papillae
- (l) Validation
- (m) Risk
- (n) Audit
- (o) Texture

2. Elucidate any three of the following (5 x 3)

- (a) Quality attributes of food
- (b) Mechanism of taste perception
- (c) Ranking tests in sensory evaluation
- (d) Instrumental methods of texture measurement
- (e) Importance of sensory evaluation

3. Write short notes on any three of the following (5 x 3)

- (a) Shellfish toxins
- (b) Factors affecting dose response relationship
- (c) Testing adverse effects of chemicals
- (d) Food Tribology
- (e) Scope of food toxicology

4. Discuss any three of the following (5 x 3)

- (a) Role of FSSAI in the food sector
- (b) Importance of Codex Alimentarius Commission
- (c) Applications of Image Processing in the Food Industry
- (d) Mandatory Certification under BIS
- (e) Elements of a national food control system

5. Answer any three of the following (5 x 3)

- (a) 7 principles of HACCP
- (b) Steps in Image processing for Food quality evaluation
- (c) 4 main elements of ISO 22000 standard
- (d) Good Hygiene Practices in food industry
- (e) Role of traceability in food industry. Elucidate with examples.