

Name:  
Enrolment No:



UPES

End Semester Examination, May 2024

Course: Food Quality Control and Analysis

Semester : IV

Program: Int. BMSC N&D

Duration: 3 Hours

Course Code: HSND2007

Max. Marks: 100

Instructions: Read all the questions carefully

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q1	What is the primary purpose of sensory evaluation in food quality control? A. To determine the nutritional content of food products B. To assess the safety of food products C. To evaluate the sensory attributes such as taste, aroma, appearance, and texture D. To quantify the levels of food additives in products	1.5	CO-1
Q2	Which of the following is NOT a physical parameter used in food quality assessment? A. Color B. Taste C. Texture D. Size	1.5	CO-1
Q3	Which of the following factors does not describe the texture of fruits and vegetables? A. Softness and hardness B. Firmness and juiciness C. Mealiness and stickiness D. Loss of color during maturation, ripening, storage, and processing	1.5	CO-1
Q4	Which of the following is not a physical factor of quality? A. Sprouting of potatoes, carrots, onions, and garlic B. Rooting of onions C. Seed germination inside fruits D. Molds on the surface of food products.	1.5	CO-1
Q5	Identify the reasons for the mastication of food. A. Gratification and Comminution B. Mix with saliva C. Release flavor and Increase surface area D. All the above.	1.5	CO-1
Q6	Fill in the blanks: ..... is the rheological and structural attributes of a food product.	1.5	CO-1

Q7	Food quality control primarily focuses on ensuring the quantity of food products rather than their quality (A-True; B-False)	1.5	CO-1
Q8	The contents of total soluble solids (TSS) of fruits are measured by: A. Gloss-meter B. Refractometers C. Lovibond tintometer D. Effegi penetrometer	1.5	CO-2
Q9	The astringency of food is related to: A. Tannin contents B. Carotenoid content C. Glycoalkaloids contents D. All the above	1.5	CO-2
Q10	Chemical methods of food quality evaluation often involve: A. Measurement of sensory attributes such as taste and aroma B. Determination of nutritional composition and food additives C. Analysis of texture using a texture analyzer D. Examination of physical appearance and color	1.5	CO-2
Q11	Which of the following is an essential component of quality? A. Appearance and texture. B. Flavor and color. C. Nutritional contents. D. All the above.	1.5	CO-2
Q12	What does the term "colorimeter" measure in relation to food quality? A. The acidity of the food product B. The size of microorganisms present C. The color intensity or hue of the food product D. The moisture content of the food product	1.5	CO-2
Q13	Fill in the blanks: The instrumentation techniques,.....is utilized to determine the volatile compounds in food.	1.5	CO-2
Q14	Which of the following is NOT a factor influencing food quality during storage? A. Temperature B. Humidity C. Atmospheric pressure D. Light exposure	1.5	CO-3
Q15	Identify the primary objectives of food quality control. A. Ensuring food safety B. Maintaining nutritional value C. Preserving freshness D. All of the above	1.5	CO-3
Q16	Which of the following is NOT considered a common source of biological hazards in food? A. Bacteria B. Fungi C. Pesticide residues D. Viruses	1.5	CO-3

Q17	Quality assurance deals with identifying the defects, while quality control is about preventing the defects (A-True; B-False).	1.5	CO-3
Q18	Define food safety.	1.5	CO-3
Q19	Why is food sampling important in quality control? A. To minimize production costs B. To ensure compliance with regulatory standards C. To increase product shelf life D. To maximize profit margins	1.5	CO-4
Q20	What is the importance of traceability in food quality control? A. Ensures transparency in the food supply chain B. Facilitates product recalls if necessary C. Helps in identifying sources of contamination D. All of the above	1.5	CO-5
<b>Section B</b> (4Qx5M=20 Marks)			
Q1	Differentiate between objective and subjective methods of quality evaluation.	5	CO-1
Q2	Explain the importance and functions of food quality control.	5	CO-2
Q3	Explain the concept of Good Manufacturing Practices and its significance in ensuring food quality and safety.	5	CO-3
Q4	Define HACCP and enumerate its fundamental principles.	5	CO-3
<b>Section C</b> (2Qx15M=30 Marks)			
Q1	Explain water activity (5 marks). Discuss in detail the moisture sorption isotherms (5 marks), and their importance in food safety (5 marks).	15	CO-4
Q2	Explain total quality management (3 marks). Discuss the approaches and steps of total quality management (9 marks). Enlist its benefits (3 marks).	15	CO-5
<b>Section D</b> (2Qx10M=20 Marks)			
Q1	Describe in detail the physical, chemical, and biological methods of food quality evaluation.	10	CO-1
Q2	What is a food sampling? Discuss the importance, approaches, and problems associated with food sampling.	10	CO-2