

Total number of printed pages: 12D/5th /DFET504

2024

FOOD QUALITY CONTROL*Full Marks : 100*

Time : Three hours

*The figures in the margin indicate full marks for the questions.**Answer any five questions.*

1.	a)	Answer the following questions in one word or a sentence. i. Define the following Quality of food, quality control, quality assurance, color difference, hue, Chroma, HACCP. ii. The primary objective of quality control is iii. The measuring unit for hardness is iv. test is used to assess the ability of individual to detect different tastes, odours and feel.	1*10
	b)	Justify the title of the subject.	3
	c)	What is the use of decision tree in quality control? Explain the use with a flowchart.	7
2.	a)	Explain the texture profile analysis test for any food sample and describe all the parameters	10
	b)	What are the main reasons for quality control	4
	c)	Show the organization plan for food processing plant with departments and their respective activates with a schematic diagram.	6
3.	a)	Explain the mechanism of color measurements of a food sample. State the equation for color difference, hue and Chroma.	10
	b)	What is sensory evaluation? How many types of taste are there? Explain the mechanism of test.	5
	c)	What are the different sensory tests used for food analysis? Explain Duo-trio and triangle test.	5
4.	a)	Define adulterant and adulteration. Name and define the types of adulterants with example. Name the adulterants for the following foods with their respective detection test. i) Turmeric ii) Ghee iii) jiggery iv) chili powder	12

	b)	Explain any two chemical tests used for food analysis with its description	8
5.	a)	Explain the principles of HACCP.	10
	b)	Explain the difference between quality control and quality assurance	4
		List any ten guidelines with proper prevalent in India for food safety as per FSSAI.	6
6.	a)	Write short notes on: i)PFA ii) Codex Alimentarius Commision iii) FAO iv) AGMARK	4*4
	b)	State the difference between ISO 9000 and ISO 22000	4
7.	a)	i. How many Central and state level laboratory are there in India for quality analysis of food product? ii. Define Good Manufacturing Practice. iii. Define food poisoning? iv. What the three attributes that are measured for color measurements? v. FSSAI was forced in vi. Carry-over taste/ after-taste is determine by.....test. vii. In duo-trio test all the given samples are different in taste (true/false). viii. GAP comes under quality assurance system (true/false). ix. Grade standards represent the technical aspects of a product (true/false). x. Temperature required for different changes in food properties, is a factor	10
	b)	What is QACP? Explain with diagram the relationship between GMP, GHP, HACCP, QACP and QMS	6
	c)	What are voluntary and obligatory quality and safety systems? How food additive differs from adulterants	4
