

Total number of printed pages: 2

PG/2<sup>nd</sup> /PFET203

2024

### Recent Trends in Food Safety and Quality Management

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions.

1.	a)	Write a note on FSSAI with its governing structure and functions for food safety.	10
	b)	What is The Global Standard for Food Safety/ Global Food Safety Initiative and its standard focus? What are the salient features and food safety schemes under GFSI?	10
2.	a)	What are the prerequisite programmes required for implementation of HACCP. Explain the principles of HACCP.	10
	b)	Define. Quality control, Quality Assurance, TQM, SOP, and HACCP	5
	c)	How CCP are calculated for HACCP implementation?	5
3.	a)	State the difference between quality control and assurance system. Explain food safety assurance system.	5
	b)	What is Six Sigma? Why is six sigma fascinating?	5
	c)	Explain the five elements of Six Sigma.” The evaluation of Total Quality management”. Explain the statement with the contribution from few Quality Guru’s	10
4.	a)	Differentiate between DMAIC and DMADV process.	5
	b)	What is BRC and explain the role of BRC in food safety	5
	c)	State the difference between TQM and Six Sigma for the following dimensions i) focus ii) principles iii) features iv) operation v) techniques	10
5.		Write target specific methods for separation & detection of microbial foodborne pathogens specifically based on bacteriophages, enzyme, antibody, nucleic acid & peptide aptamers and carbohydrate ligands.	20
6.		Briefly rite species name, source & route of transmission, associated	20

		toxicity & symptoms for the following pathogen : <i>Listeria monocytogens</i>	
7.	i)	Briefly discuss potent hazards of food contaminants from industrial waste	10
	ii)	Write species name, source associated toxicity & symptoms for pathogenic <i>Staphylococcus species</i> .	10

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