

Total number of printed pages: Programme (PG)/2<sup>nd</sup> /PFET203

2023

**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)	Define food safety management system (FSMS). Explain the difference between “quality control” and “quality assurance”?	2+3
	b)	Explain the principle of HACCP. How CCPs are determined for HACCP implementation?	7+5 = 12
	c)	Explain the role of FSSAI in food safety and its governing structure in a schematic chart.	3
2.	a)	Define GFSI, BRC, SQF and FSSC 2000. What are the main objectives of The Global Food Safety Initiative? List out the food safety management schemes that fulfil the criteria of the GFSI Guidance Document	4+6
	b)	Write short notes on ISO 22000. State the difference between CAC and ISO	3+2
	c)	State the difference between HACCP and HARPC	5
3.	a)	Write a short note on FSSC 22000 with their benefits in food safety systems	5
	b)	Write a note on FSSAI with its general structure and functions for food safety.	5
	c)	Write species name, source associated toxicity & symptoms for pathogenic <i>Vibrio</i> species.	5
4.		Write target specific methods for separation, concentration & detection of microbial foodborne pathogens specifically based on bacteriophages, biotin-streptavidin interaction, nucleic acid & peptide aptamers and carbohydrate ligands.	20
5.		Briefly write species name, source & route of transmission, associated toxicity & symptoms for the following pathogen : <i>Listeria monocytogens</i>	20

6.		Discuss species name, source & route of transmission, associated toxicity & symptoms for the pathogen, <i>Salmonella sp.</i>	20
7.		Discuss species name, source & route of transmission, associated toxicity & symptoms for the pathogen, <i>Bacillus sp.</i>	20

