

2022

**MODERN FRUITS & VEGETABLES PROCESSING TECHNIQUES***Full Marks: 100*

Time: Three hours

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

1.	a)	Define texture of food? Why measurement of texture is important to determine the quality of food? Explain the TPA test in detail	12
	b)	How hazards are characterised and categories on the basis of its severity. Show the decision tree method to determine critical control point in a hazard analysis process	8
2.	a)	How colour can be measured for any food sample. Explain the detail mechanism.	10
	b)	Define color of food. What are the attributes that are measured in color measurement? Define with mathematical representation	3+7=10
3.	a)	Provide short notes on the following methods for the preservation of fresh fruits & vegetables (any two). (i). Refrigeration (ii). Natural preservatives (iii). Edible films and coatings	5+5=10
	b)	Explain the concept of thin profile processing of foods. Mention the critical factors affecting the process also.	8+2=10
4.	a)	Discuss about two types of sanitizers with two specific examples of each type	6
	b)	State and Explain the adulterants and method of detection for the mention types of food items.	2+12
	i)	Dairy food items (any two)	
	ii)	Oil and fats ( any two)	
	iii)	Food grains ( any two)	

		iv) Spices ( any two)	
5	a)	Describe the working principle of microwave processing of foods with suitable diagram. Give its applications also.	10
	b)	Explain about the application of enzymes in apple mash treatment process with proper flow chart.	10
6	a)	Explain about manufacturing process of cordial with suitable flow chart. Mention about the production problems also.	8+2=10
	b)	Give the process flow chart for the manufacturing of following products (any two): (i). Fruit juice (ii). Nectar (iii). Pickle (iv). Tomato Sauce	5+5=10
7	a)	Define sanitation. State the ten sanitary design principles followed in food plant.	10
	b)	Define the terms Food hygiene, sanitation, disinfectant, sanitizers	4
	c)	What is food adulteration and food adulterant? State the types of adulterations?	6

