Total number of printed pages: 4

## PG/1<sup>st</sup>/PFET 1111

#### 2022

# KRAHAR 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)	<ul> <li>Provide short notes on the following methods for the preservation of fresh fruits &amp; vegetables (any two).</li> <li>(i). Refrigeration</li> <li>(ii). Natural preservatives</li> <li>(iii). Edible films and coatings</li> </ul>	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)	

Mention about the production problems also.         b)       Give the process flow chart for the manufacturing of following products (any two):         (i). Fruit juice       (ii). Nectar         (iii). Nectar       (iii). Pickle         (iv). Tomato Sauce       10         plant.       10         b)       Define sanitation. State the ten sanitary design principles followed in food plant.         c)       What is food adulteration and food adulterant? State the types of adulterations?	suitable diagram. Give its applications also.1b)Explain about the application of enzymes in apple mash treatment process with proper flow chart.106a)Explain about manufacturing process of cordial with suitable flow chart. Mention about the production problems also.8+2=b)Give the process flow chart for the manufacturing of following products (any two): (i). Fruit juice (ii). Nectar (iii). Nectar (iii). Pickle (iv). Tomato Sauce5+5=7a)Define sanitation. State the ten sanitary design principles followed in food plant.10b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of6	5		iv) Spices ( any two)	
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=1         b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=1         (i). Fruit juice       (ii). Nectar       5+5=1         (iii). Nectar       (iv). Tomato Sauce       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	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=         b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=         (i). Fruit juice       (ii). Nectar       5+5=         (iii). Nectar       (iii). Pickle       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		a)	Describe the working principle of microwave processing of foods with	10
a)       with proper flow chart.         6       a)       Explain about manufacturing process of cordial with suitable flow chart. Mention about the production problems also.       8+2=1         b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=1         (i). Fruit juice       (ii). Nectar       5+5=1         (iii). Nectar       (iii). Nectar       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	a)       with proper flow chart.         6       a)       Explain about manufacturing process of cordial with suitable flow chart. Mention about the production problems also.       8+2=         b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=         (i). Fruit juice       (ii). Nectar       5+5=         (iii). Nectar       (iii). Pickle       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				
6       a)       Explain about manufacturing process of cordial with suitable flow chart. Mention about the production problems also.       8+2=1         b)       Give the process flow chart for the manufacturing of following products (any two): (i). Fruit juice (ii). Nectar (iii). Nectar (iii). Pickle (iv). Tomato Sauce       5+5=1         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	6       a)       Explain about manufacturing process of cordial with suitable flow chart. Mention about the production problems also.       8+2=         b)       Give the process flow chart for the manufacturing of following products (any two): (i). Fruit juice (ii). Nectar (iii). Nectar (iii). Pickle (iv). Tomato Sauce       5+5=         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		b)	Explain about the application of enzymes in apple mash treatment process	10
Mention about the production problems also.         b)       Give the process flow chart for the manufacturing of following products (any two):         (i). Fruit juice       (ii). Nectar         (iii). Nectar       (iii). Nectar         (iv). Tomato Sauce       10         plant.       10         b)       Define sanitation. State the ten sanitary design principles followed in food plant.         c)       What is food adulteration and food adulterant? State the types of adulterations?	Mention about the production problems also.       5+5=         b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=         (i). Fruit juice       (ii). Nectar       10         (iii). Nectar       (iv). Tomato Sauce       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			with proper flow chart.	
b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=1         (i). Fruit juice       (ii). Nectar       (iii). Nectar         (iii). Nectar       (iii). Pickle       (iv). Tomato Sauce         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	b)       Give the process flow chart for the manufacturing of following products (any two):       5+5=         (i). Fruit juice       (ii). Nectar       (iii). Nectar         (iii). Nectar       (iii). Pickle       (iv). Tomato Sauce         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	6	a)		8+2=10
(any two):       (i). Fruit juice         (ii). Nectar       (iii). Nectar         (iii). Pickle       (iv). Tomato Sauce         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	(any two):       (iny two):         (i). Fruit juice       (ii). Nectar         (iii). Nectar       (iii). Pickle         (iv). Tomato Sauce       (iv). Tomato Sauce         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				
(i). Fruit juice         (ii). Nectar         (iii). Nectar         (iii). Pickle         (iv). Tomato Sauce         7       a) Define sanitation. State the ten sanitary design principles followed in food plant.         b) Define the terms Food hygiene, sanitation, disinfectant, sanitizers         4         c) What is food adulteration and food adulterant? State the types of adulterations?	(i). Fruit juice         (ii). Nectar         (iii). Nectar         (iii). Pickle         (iv). Tomato Sauce         7       a) Define sanitation. State the ten sanitary design principles followed in food plant.         b) Define the terms Food hygiene, sanitation, disinfectant, sanitizers         4         c) What is food adulteration and food adulterant? State the types of adulterations?		b)		5+5=10
(ii). Nectar(iii). Pickle(iv). Tomato Sauce7a)Define sanitation. State the ten sanitary design principles followed in food plant.b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of adulterations?	(ii). Nectar         (iii). Pickle         (iv). Tomato Sauce         7       a) Define sanitation. State the ten sanitary design principles followed in food plant.         b) Define the terms Food hygiene, sanitation, disinfectant, sanitizers       4         c) What is food adulteration and food adulterant? State the types of adulterations?       6				
(iii). Pickle (iv). Tomato Sauce7a)Define sanitation. State the ten sanitary design principles followed in food plant.b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of adulterations?	(iii). Pickle         (iv). Tomato Sauce         7       a) Define sanitation. State the ten sanitary design principles followed in food plant.         b) Define the terms Food hygiene, sanitation, disinfectant, sanitizers       4         c) What is food adulteration and food adulterant? State the types of adulterations?       6				
(iv). Tomato Sauce7a)Define sanitation. State the ten sanitary design principles followed in food plant.10b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of adulterations?6	(iv). Tomato Sauce7a)Define sanitation. State the ten sanitary design principles followed in food plant.10b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of adulterations?6				
7a)Define sanitation. State the ten sanitary design principles followed in food plant.10b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of adulterations?6	7a)Define sanitation. State the ten sanitary design principles followed in food plant.10b)Define the terms Food hygiene, sanitation, disinfectant, sanitizers4c)What is food adulteration and food adulterant? State the types of adulterations?6				
plant.       b)       Define the terms Food hygiene, sanitation, disinfectant, sanitizers       4         c)       What is food adulteration and food adulterant? State the types of adulterations?       6	plant.       b)       Define the terms Food hygiene, sanitation, disinfectant, sanitizers       4         c)       What is food adulteration and food adulterant? State the types of adulterations?       6				
b)       Define the terms Food hygiene, sanitation, disinfectant, sanitizers       4         c)       What is food adulteration and food adulterant? State the types of adulterations?       6	b)       Define the terms Food hygiene, sanitation, disinfectant, sanitizers       4         c)       What is food adulteration and food adulterant? State the types of adulterations?       6	7	a)		10
c)       What is food adulteration and food adulterant? State the types of adulterations?       6	c)       What is food adulteration and food adulterant? State the types of adulterations?       6		1 \		
adulterations?	adulterations?		ŕ		
			c)		6
ALTASTIC	Real Marine Ot				
					1