


Name:			
Enrolment No:			
<p style="text-align: center;"><b>UPES</b>  <b>End Semester Examination, May 2025</b></p> <p> <b>Course: Food Processing and Preservation Technology</b>  <b>Program: Integrated (B. Sc.) - (M. Sc.) Nutrition and Dietetics</b>  <b>Course Code: HSFT3014</b> </p> <p style="text-align: right;"> <b>Semester : VI</b>  <b>Duration : 3 Hours</b>  <b>Max. Marks: 100</b> </p>			
<b>Instructions:</b>			
<b>S. No.</b>	<b>Section A</b>  <b>Short answer questions/ MCQ/T&amp;F</b> <b>(20Qx1.5M= 30 Marks)</b>	<b>Marks</b>	<b>COs</b>
<b>Q 1</b>	What are emulsions?	<b>1.5</b>	<b>CO1</b>
<b>Q 2</b>	Name a food example of a gel.	<b>1.5</b>	<b>CO1</b>
<b>Q 3</b>	What is pasteurization?	<b>1.5</b>	<b>CO1</b>
<b>Q 4</b>	Define irradiation.	<b>1.5</b>	<b>CO1</b>
<b>Q 5</b>	What is Psychometric chart?	<b>1.5</b>	<b>CO1</b>
<b>Q 6</b>	State one benefit of aseptic packaging.	<b>1.5</b>	<b>CO1</b>
<b>Q 7</b>	Give one example of Class I preservative.	<b>1.5</b>	<b>CO1</b>
<b>Q 8</b>	What is “F Value”?	<b>1.5</b>	<b>CO1</b>
<b>Q 9</b>	What is ‘Indigo carmine’?	<b>1.5</b>	<b>CO1</b>
<b>Q 10</b>	Define Immersion Freezing.	<b>1.5</b>	<b>CO1</b>
<b>Q 11</b>	What is commercial sterilization?	<b>1.5</b>	<b>CO1</b>
<b>Q 12</b>	Which colloidal system is used in mayonnaise?	<b>1.5</b>	<b>CO1</b>
<b>Q 13</b>	What is the full form of NMR?	<b>1.5</b>	<b>CO1</b>
<b>Q 14</b>	Give one example of anti-caking agent.	<b>1.5</b>	<b>CO1</b>
<b>Q 15</b>	Which preservative are particularly used for meat and meat products?	<b>1.5</b>	<b>CO1</b>
<b>Q 16</b>	State one characteristic of colloid.	<b>1.5</b>	<b>CO1</b>
<b>Q 17</b>	Give one example of a low-calorie sweetener.	<b>1.5</b>	<b>CO1</b>
<b>Q 18</b>	State True or False: Vacuum drying technique removes water from a slurry.	<b>1.5</b>	<b>CO1</b>
<b>Q 19</b>	State True or False: Long term consumption of metanil yellow can cause cancer.	<b>1.5</b>	<b>CO1</b>
<b>Q 20</b>	White paperboards are suitable packaging material for: a. ice cream	<b>1.5</b>	<b>CO1</b>

	b. juice c. egg. d. tea		
<p align="center"><b>Section B</b> <b>(4Qx5M=20 Marks)</b></p>			
<b>Q 1</b>	Describe the advantages of microwave heating.	<b>5</b>	<b>CO2</b>
<b>Q 2</b>	Differentiate between intentional and unintentional food additives with examples.	<b>5</b>	<b>CO2</b>
<b>Q 3</b>	Discuss about Class II preservatives.	<b>5</b>	<b>CO2</b>
<b>Q 4</b>	Discuss the Batch Method of pasteurization.	<b>5</b>	<b>CO2</b>
<p align="center"><b>Section C</b> <b>(2Qx15M=30 Marks)</b></p>			
<b>Q 1</b>	Differentiate between pasteurization and sterilization.	<b>15</b>	<b>CO3</b>
<b>Q 2</b>	Discuss about freeze dryer, drum dryer and foam mat dryer.	<b>15</b>	<b>CO3</b>
<p align="center"><b>Section D</b> <b>(2Qx10M=20 Marks)</b></p>			
<b>Q 1</b>	Describe the steps in the canning procedure with a flow chart.	<b>10</b>	<b>CO4</b>
<b>Q 2</b>	What are the advantages, disadvantages and packaging forms of glass containers.	<b>10</b>	<b>CO4</b>