

**GURU NANAK INSTITUTE OF TECHNOLOGY****An Autonomous Institute under MAKAUT****2022****BAKERY, CONFECTIONARY AND EXTRUDED FOODS****FT603****TIME ALLOTTED: 3 HOURS****FULL MARKS: 70***The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable***GROUP – A****(Multiple Choice Type Questions)**Answer any **ten** from the following, choosing the correct alternative of each question: **10×1=10**

		Marks	CO No
(i)	Protein present in Wheat flour is (a) Myoglobin (b) Casein (c) Zein (d) None of these	1	CO1
(ii)	Ammonium bicarbonate is an example of (a) Leavening acid (b) Chemical leavening agent (c) Biological leavening agent (d) Dough modifier	1	CO1
(iii)	Select the nutritive sweetener (a) Glucose. (b) Acesulfame K (c) Aspartame (d) Saccharine	1	CO1
(iv)	In delayed salt type of dough mixing method salt is added (a) At the beginning. (b) In sponge part. (c) At the end of mixing. (d) At the stage of remixing	1	CO2
(v)	Chorley wood mixer is a (a) Slow speed mixer (b) High speed mixer (c) High energy mixer (d) Both slow and high speed mixer	1	CO1
(vi)	Wafer has a sugar content of (a) 80% (b) 50% (c) 20% (d) Sugar is not added at all	1	CO2
(vii)	In twin screw extruder the screws may be (a) only co rotating type (b) counter rotating type (c) both type (d) screws are not rotating at all	1	CO4

(viii)	Yield of bread is higher in (a) Straight dough (b) Delayed salt (c) Sponge dough (d) Chorley wood dough.	1	CO3
(ix)	In cracker biscuit the leavening agent used is (a) Chemical. (b) Biological. (c) Both. (d) Leavening agent is not used at all.	1	CO4
(x)	One slice of whole wheat bread is ____ percent water. (a) 28 (b) 32 (c) 25 (d) 38	1	CO4
(xi)	____ flour has been used for many products as a substitute flour for individuals with an allergy to wheat flour. (a) Cake (b) Bread (c) Rice (d) Soy	1	CO2
(xii)	The most common sweetener used in candies and chocolates is ____. (a) glucose (b) maltose (c) lactose (d) sucrose	1	CO4

**GROUP – B**

**(Short Answer Type Questions)**

Answer any *three* from the following:  $3 \times 5 = 15$

		<b>Marks</b>	<b>CO No</b>
2.	Explain the important factors for preparation techniques of pies and pastries	5	CO4
3.	Explain different types of dough ovens	5	CO1
4.	What are the factors to determine the quality of wheat?	5	CO2
5.	(a) Write down the advantages of using biological leavening agent over chemical leavening agent.	2	CO2
	(b) What are the advantages and disadvantages of using sodium bicarbonate as leavening agent?	3	CO2
6.	(a) Differentiate between the confectionery products: chocolates and candies.	2	CO4
	(b) Describe briefly the enrobing process of chocolates.	3	CO4

**GROUP – C**

**(Long Answer Type Questions)**

Answer any *three* from the following:  $3 \times 15 = 45$

		<b>Marks</b>	<b>CO No</b>
7.	(a) Write a flow sheet of bread production with details of each step.	10	CO2
	(b) Describe the different types of Dough mixing methods	5	CO2

8.	Discuss about the safety and hygiene of bakery industry	15	CO3
9	(a) Write about the types of packaging used for different bakery product	10	CO3
	(b) What are the factors on which shelf life of packaged bakery material depend?	5	CO3
10.	(a) With a neat schematic diagram, explain the design and operational principle of extrusion process	7	CO4
	(b) Discuss the manufacturing process of making texturized vegetable protein or meat analogue by using twin screw extruder.	8	CO4
11.	(a) In high energy mixer yeast requirement, power requirement is more but still the product is profitable why?	3	CO1
	(b) Discuss about the various mixers used in bakery industry	12	CO1