2023

FOOD PRODUCT TECHNOLOGY-IV (BAKERY, CONFECTIONARY AND EXTRUDED PRODUCTS)

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any five** questions.*

1.	a)	Define baking. Explain the principle of baking with suitable diagram.		1+7=8
	b)	Write two functions of any six ingredients used in bakery products from the followings: water, egg, salt, dough improvers, fats and oils, sugar, sugar, flour		2×6=12
2.	a)	Write short notes (any 4)		4×5=20
		i)	Baker's yeast	
		ii)	Ribbon mixer	
		iii)	Safety and hygiene of bakery products	
		iv)	Leavening agents	
		v)	Planetary mixer	
		vi)	Straight dough method of bread production	
3.	a)	Write the corrective measures for any three defects/faults in bakery products (cake, bread, biscuits etc.)		2×3 = 6
	b)	Describe the biscuit making process with a flowchart.		10
	c)	How do steam and air act as leavening agents?		2+2=4
4.	a)	Explain the principle of extrusion with suitable diagram.		6
	b)	Classify the extrusion process based on method of operation. Give examples of foods produced by those processes.		4
	c)	Why is the barrel wall of single screw extruder grooved?		2
	d)	What are the different means to achieve compression in the extruder barrel?		4

	e)	Write any 4 advantages of extrusion process.	4
5.	a)	Describe how the use of various substances affects the crystallisation of sugar.	6
	b)	How do you determine the end point of the boiled sugar syrup while manufacturing sugar-boiled confectionery?	2
	c)	What is sugar-boiled confectionery? Describe its types and their preparation methods.	2+10=12
6.	Explain the process of cocoa processing and describe various changes that occur during each step of processing.		20
7.	a)	Describe the process of chocolate manufacturing.	10
	b)	What are the major defects in chocolate? Discuss the reason behind those defects.	4
	c)	Describe the features of crystals formed by the fats in cocoa butter during chocolate manufacturing.	6