

**Total number of printed pages:      Programme (UG)/6th /UFET611**

**2025**

**Food Product Technology-IV (Bakery, confectionary &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)	Write the chocolate making process from cocoa beans. Why emulsifier is important in chocolate as ingredient? What is conching?	<b>10+5+5=20</b>
2.	a)	What is extrusion cooking? Write their types with specific application/example. Write the chemical reactions that occur in food during extrusion cooking. Why extruded product puffs?	<b>4+5+7+4=20</b>
3.	a)	What is bran, germ and endosperm of wheat?	6
	b)	What are the main baking ingredients and additives for bread/cake/biscuit?	10
	c)	Write the steps of biscuit making.	4
4.	a)	How gluten network formation and starch gelatinization help to develop texture of baked product?	8
	b)	What is the role of emulsifier and stabilizer in dough development?	6
	c)	What is shelf life & storage stability?	6
5.	a)	How yeast is effective in bread making? Mention biochemical reaction steps.	8
	b)	What is baking powder? What is baking soda? What is the difference? How do they act in leavening baked product? What is white bread mold?	2+2+3+3+2=12
6.	a)	Write briefly: (All eight questions)  TBA(Thio-barbituric acid) method for estimation of storage stability of baked product  Importance of Sodium monostearate in baking.	20

		Malliard Reaction Cream of Tartar Celiac disease Glycemic index Non-nutritive sugar Staling of bread	
7.	a)	Write biscuit baking problems and solutions.	20

