Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2161409 **Date: 03/05/2017**

Subject Name: Bakery and Confectionary Technology

Time: 10:30 AM to 01:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1		**Short Questions**	**14**
	i)	What is hard wheat?	
	ii)	Write any two examples of maturing agents.	
	iii)	Give the scientific name of cocoa plant.	
	iv)	Name the commonly used equipment for chocolate refining.	
	v)	Write the function of gluten in bread dough.	
	vi)	Define dextrose equivalent (DE).	
	vii)	Give two examples of antioxidants. .	
	viii)	Which is the main leavening agent in biscuits?	
	ix)	Mention the required conditions to be maintained during final proofing of bread.	
	x)	Which is most stable polymorphic form of cocoa butter?	
	xi)	What are principal raw materials for manufacture of hard boiled candy?	
	xii)	Define: Glazing	
	xiii)	What are different morphological parts of cocoa bean?	
	xiv)	Which step is important for flow property optimization of chocolate?	
Q.2	**(a)**	Write the uses of invert sugar in the preparation of bakery products.	**03**
	(b)	State the different grades of wheat flour obtained during milling.	**04**
	(c)	Describe the principles of conching process during chocolate manufacture	**07**
		OR	
	(c)	What is the significance of tempering? Describe how tempering is carried out?	**07**
Q.3	**(a)**	Classify the ingredients according to their function required for cake preparation.	**03**
	(b)	Write a note on ‘breaking and winnowing during chocolate manufacture’.	**04**
	(c)	Discuss the characteristics and role of different parts of egg in bakery industry.	**07**
		OR	
Q.3	**(a)**	Give flow diagram for manufacture of hard boiled candy	**03**
	(b)	State the common defects in cake with their causes.	**04**
	(c)	What do you mean by leavening process? Describe shortly the types of leavening agents available for food industry.	**07**
Q.4	**(a)**	What are the effects of under fermentation and over fermentation of bread dough?	**03**
	(b)	Explain different polymorphic forms of cocoa butter	**04**
	(c)	Discuss the various physico-chemical changes occur during baking of bread dough.	**07**

OR

Q.4	**(a)**	Comment on ‘Properties of liquid glucose’	**03**
	(b)	Enlist the mixing stages of bread dough passes during mixing and shortly explain any three stages.	**04**
	(c)	Briefly describe the flow diagram of bread preparation.	**07**

Q.5	**(a)**	Write in brief about chemistry of starch.	**03**
	(b)	What are different principles of chocolate cooling?	**04**
	(c)	Enlist the methods of cake mixing and briefly describe any two methods.	**07**

OR

Q.5	**(a)**	Write a note on ‘ chocolate enrobing’	**03**
	(b)	What do you mean by cookies, crackers and biscuit? Give one example of each.	**04**
	(c)	Explain the important features of cake formulas according to fat quantity and sugar quantity.	**07**

****