Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER VIII– • EXAMINATION – SUMMER 2015

Subject Code: 181402 **Date: 11/05/2015**

Subject Name: Horticultural Produce Processing

Time: 10.30am-01.00pm **Total Marks: 70**

Instructions:

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

Q.1	**(a)**	Define 'Post harvest loss' and explain various factors affecting on post harvest losses of food commodities.	**07**
	(b)	State various changes taking place during ripening process and describe textural changes.	**07**
Q.2	**(a)**	Explain various defects in fruit jelly and how they can be prevented?	**07**
	(b)	Enlist various methods used for determination of maturity of fruits and vegetables and write in brief about computational methods.	**07**
		OR	
	(b)	Write down flow diagram for preparation of tomato ketchup and give legal specifications for various tomato products.	**07**
Q.3	**(a)**	Describe various advantages of processing of horticultural commodities.	**07**
	(b)	Explain the role of chemical preservatives in preservation of fruit juices.	**07**
		OR	
Q.3	**(a)**	Define canning and explain the process for mango pulp canning.	**07**
	(b)	Enlist the different types of fruit beverages and explain the fruit juice clarification process using chemical fining agents.	**07**
Q.4	**(a)**	What do you mean by respiratory quotient? Write in detail about respiratory substrates.	**07**
	(b)	Explain the techniques used for measurement of respiratory gases during storage.	**07**
		OR	
Q.4	**(a)**	Give process flow diagram for manufacture of mango pickle and explain the role of individual pickle ingredients.	**07**
	(b)	State various factors affecting on respiration process and describe any three factors.	**07**
Q.5	**(a)**	Describe the various techniques to judge the end point of jelly set.	**07**
	(b)	Explain the effect of altitude and product acidity on canning process of fruits and vegetables.	**07**
		OR	
Q.5	**(a)**	Write short notes on following a. Blanching of fruits and vegetables b. Juice clarification using gelatin.	**07**
	(b)	Give the FPO specifications of jam and describe the technological flow chart for preparation of jam.	**07**

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