Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VIII • EXAMINATION – SUMMER • 2015** 

Subject Code: 181405 Date:05/		5/2015	
Ti	me: 1 truction 1.	t Name: Food Ingredients and Flavor Technology 0.30AM-01.00PM Total Marks: ons:  Attempt all questions.  Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	70
Q.1	(a)	Comment on  i. Log P value  ii. Umami  iii. Threshold level  iv. Chemesthesis	08
	<b>(b)</b>	Write a note on "AH/B theory for detection of sweet taste"	06
Q.2	(a) (b)	Define olfaction and describe theories of olfaction.  What is role of leavening agent in food? Write in detail about different types of leavening agents used in food industry.  OR	07 07
	<b>(b)</b>	Discuss properties, mode of action and usage level of benzoic acid in different	07
Q.3	(a)	food products.  What do you mean by "Enzyme derived flavoring"? explain with suitable	07
	<b>(b)</b>	examples  Differentiate between essential oil and oleoresins and give applications of oleoresins in food industry.	07
Q.3	(a)	<b>OR</b> Give the characteristics of a supercritical fluid with a well labeled phase diagram and briefly explain factors affecting on supercritical fluid extraction.	07
Q.4	(b) (a)	Comment on Nitrite and nitrate salts as food additive.  What is the role of flavour enhancers in processed foods? Write in detail about	07 07
	<b>(b)</b>	their types and manufacturing process.  Give the proportionality law of color matching and explain the Hunter colorimeter system.  OR	07
Q.4	(a)	Discuss the significance of emulsion in food industry and describe the process	07
	<b>(b)</b>	of emulsion destabilization.  Discuss mode of action and properties of humectants and texturizing agent in food products.	07
Q.5	(a)	Explain various principles involved in isolation of aroma compounds	07
	<b>(b)</b>	Describe the anatomical components involved in detection of taste.  OR	07
Q.5	(a) (b)	Describe mechanism involved in detection of salty and sour taste Write in detail about anatomy of olfaction process.	07 07
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