Seat No.:	Enrolment No.

Subject Code:181405

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION - SUMMER 2016

Date:16/05/2016

Tiı	Subject Name:Food Ingredients and Flavour Technology (Department Elective - II) 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	(a) (b)	Answer the following questions in brief. i) What are hazards of high intakes of vitamin A? ii) Introduce briefly Nisin. iii) State Transitivity law for color matching. iv) Define Natural flavorings. v) Comment on food additives safety. vi) State the principle involved in preservation by addition of sugar. vii) Define leavening agent. Write detailed note on flavour enhancers with respect to types, manufacturing, stability and usage level.	07
Q.2	(a) (b)	Describe the constraints in flavour analysis. Define antioxidant. Explain the properties of TBHQ and propyl gallate. OR	07 07
Q.3	(b)(a)(b)	Explain CIE system for color measurement. Explain the correlation between chemical structure and primary tastes. Explain triple point of water and supercritical fluid with a neat sketch of fluid phase diagram.	07 07 07
Q.3	(a) (b)	OR Describe various anatomical parts involved in gustation process. What is acidulant? Explain the properties of phosphoric acid and acetic acid.	07 07
Q.4	(a) (b) (c)	Explain the classification of food preservatives with suitable examples. Discuss briefly on deep fat fried flavours. Explain the causes of Vitamin B_{12} deficiency? OR	07 04 03
Q.4	(a) (b) (c)	Compare essential oil and oleoresins with respect to their applications, advantages and limitations. State the mode of action of benzoates and sulphur dioxide as preservative. How maillard reactions leads flavour formations in food products?	07 04 03
Q.5	(a) (b) (c)	Explain methods of flavour analysis. Highlight on alliaceous flavours. State the classification of emulsion based on internal phase ratio. OR	07 04 03
Q.5	(a) (b) (c)	Explain the development of cocoa flavour during processing. What is HLB index? State its significance in selection of emulsifier. Write short note on Natural colors.	07 04 03
