Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-III EXAMINATION - SUMMER 2016

Subject Code:131401 Date: 02/06/2016 **Subject Name:Food Chemistry** Time:10:30 AM to 01:00 PM **Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q.1** Enlist the methods of moisture determination in food and describe any two 07 (a) methods **(b)** Define food additives and explain the various functions of food additives. 07 Give detailed classification of food proteins 07 0.2 Enlist the disaccharides and explain the structure & properties of any one in **(b) 07** detail. OR (b) State various pigments found in food and write in detail about any two 07 pigments Write the detail classification of carbohydrate with suitable examples. 0.3 07 (a) Explain the role of salt in preservation of foods. 07 **(b)** Explain the role of invert sugar in various foods. 07 0.3 (a) What is polyols? Explain how polyols are useful in foods. 07 **(b)** Describe the protein gel formation phenomena along with theories of gel 07 **Q.4** formation What is effect of chemical structure of water molecule on it's properties? **(b)** 07 0.4 Describe the compound lipids 07 (a) Explain chemical properties of proteins **07 (b)** 07 Q.5 Write a detailed note on types of water in food What do you mean by denaturation of protein? Explain with factors responsible **07** for denaturation OR Differentiate between saturated and unsaturated fatty acids. Write in detail **07** 

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Q.5

(a)

about essential fatty acid.

**(b)** Describe the process of manufacture of edible oil.

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