



Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (OLD) EXAMINATION – WINTER 2017****Subject Code:131401****Date:14/11/2017****Subject Name: Food Chemistry****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) Describe the classification of food proteins with suitable examples. **07**
- (b) State various disaccharides and explain the structure and properties of any one disaccharide. **07**
- Q.2** (a) What is dextrin? Explain the role of maltodextrin in food processing. **07**
- (b) State various pigments found in food and write in detail about any two pigments **07**
- OR**
- (b) What is effect of chemical structure of water molecule on its properties? **07**
- Q.3** (a) Explain chemical properties of proteins **07**
- (b) What is polyols? Explain how polyols are useful in foods. **07**
- OR**
- Q.3** (a) Write in detail the importance of water activity in food. **07**
- (b) Describe the criteria to select the food additives to be used in processed food products. **07**
- Q.4** (a) Define food additives and explain the various functions of food additives. **07**





- (b) Enlist various methods moisture estimation and explain any one. 07

OR

- Q.4 (a) What are the class-I and class-II preservatives? Explain class-II preservatives 07

- (b) Write in detail about simple lipids. 07

- Q.5 (a) State the role of following food additives. 07

a. Leavening agent b. Anticaking agent

- (b) Differentiate between saturated and unsaturated fatty acids. Write in detail about essential fatty acid 07

OR

- Q.5 (a) Write the detail classification of carbohydrate with suitable examples. 07

- (b) Describe the phenomena of protein gel formation with its supporting theories 07