

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**

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