

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-III EXAMINATION – WINTER 2015

Subject Code:131401**Date:23/12/2015****Subject Name: Food Chemistry****Time: 2:30pm to 5:00pm****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) Define lipid and write a detailed note on compound lipids. **07**
(b) Explain flavonoids in detail. **07**
- Q.2** (a) Enlist the various disaccharides and explain the structure and properties of any one disaccharide. **07**
(b) State the functions and sources of Fe and Cu in human health. **07**
- OR**
- (b) Describe the protein denaturation phenomena with its effects. **07**
- Q.3** (a) Explain the method to determine the moisture content of spices. **07**
(b) Describe the effect of water activity on various biochemical processes in food. **07**
- OR**
- Q.3** (a) Enlist various methods of starch hydrolysis and explain any one in detail. **07**
(b) Enlist various leavening agents and explain the role of any one in detail. **07**
- Q.4** (a) State the properties of following sugars. **07**
1. Glucose 2. Levulose
(b) Enlist the various ways to control the water activity of foods and explain any one in detail. **07**
- OR**
- Q.4** (a) Explain the factors affecting the stability of anthocyanin. **07**
(b) How the safety of food additives is assessed. **07**
- Q.5** (a) Give the detailed classification of food proteins. **07**
(b) Explain the oil refining process. **07**
- OR**
- Q.5** (a) Enlist and describe physical properties of lipids. **07**
(b) Draw a typical structure of protein and describe biological functions of food proteins. **07**
