

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VIII EXAMINATION – WINTER 2016

Subject Code: 181405**Date: 22/10/2016****Subject Name: Food Ingredients and Flavour Technology (Department Elective - II)****Time: 02:30 PM to 05:00 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) Define 'Flavor' and give importance of flavor in food industry. **07**
 (b) Explain how primary taste detection is regionally distributed on tongue? Write a note on 'other aspects of taste' **07**
- Q.2** (a) What are Food Additives? Discuss the role of following food additives with suitable examples: **07**
 i) Antioxidants ii) Stabilizers
 (b) Describe the distillation methods used for extraction of flavor component. **07**
- OR**
- (b) Write a detailed note on 'Chemesthetic response' **07**
- Q.3** (a) Describe various parts of human olfactory system. **07**
 (b) Describe the CIE system for colour measurement. **07**
- OR**
- Q.3** (a) Explain the mechanism involved in detection of sour and salty taste. **07**
 (b) Write short notes on: **07**
 i) Attributes of colour
 ii) Laws of colour matching
- Q.4** (a) Describe the principle and mode of action of sugar as a preservative? **07**
 (b) What is HLB Index? Write its importance. **04**
 (c) Define: i) Halophiles ii) Osmophiles iii) Plasmolysis **03**
- OR**
- Q.4** (a) Write short notes on: **07**
 i) Baking Powder as a leavening agent
 ii) Class II Preservatives
 (b) Explain the terms 'Natural Flavourings' and 'Nature Identical Flavourings' **04**
 (c) Which parameters are considered during selection of emulsifier in food? **03**
- Q.5** (a) Explain the role of enzymes in flavour development with suitable example. **07**
 (b) Explain various principles of isolation of aroma compounds. **07**
- OR**
- Q.5** (a) Describe the flavour extraction process of: **07**
 i) Vanilla flavour
 ii) Cocoa flavour
 (b) Write in brief about sweet taste and explain the AH-B theory for detection of sweet taste. **07**
