

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2171407

Date: 09/05/2017

Subject Name: Horticultural Produce Processing

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) State various changes taking place during ripening process and describe textural changes in fruits. **07**
(b) Explain the effect of altitude on time and temperature of can processing. **07**
- Q.2** (a) Write short notes on: **07**
1. Quality of tin plate
2. Grading of fruits for canning
(b) Describe pickling process and explain the role of ingredients in pickle. **07**
- OR**
- (b) Describe the discolouration of canned products caused by sulphited sugar. **07**
- Q.3** (a) Define horticulture and discuss the importance of horticultural crop processing. **07**
(b) Differentiate between climacteric and non climacteric fruits and describe respiratory patterns in horticultural commodities. **07**
- OR**
- Q.3** (a) Briefly explain the techniques to overcome the following defects in jam: **07**
1. Premature setting
2. Sugar crystallization
(b) Write a detailed note on maturity indices of fruits and vegetables. **07**
- Q.4** (a) Explain in detail about the basis of sugar quantification and its requirement for jelly manufacturing. **07**
(b) Describe the techniques used for measurement of respiratory gases during storage. **07**
- OR**
- Q.4** (a) Explain the effect of following factors on the quality of fruit jelly: **07**
1. Addition of too much sugar
2. Cooking below and beyond the end point
3. Lack of acid
(b) Describe the flow diagram for manufacture of tomato ketchup with important technical points. **07**
- Q.5** (a) Explain the apple juice clarification process using gelatin. **07**
(b) Enlist various effects of respiration process and describe any two effects. **07**
- OR**
- Q.5** (a) Describe how gas composition of surrounding atmosphere affects on respiration Process of fruits and vegetables. **07**
(b) Explain in detail about the preservation of fruit juice by potassium meta bisulphate. **07**
