

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2014 Admission
IIIrd Semester Final Examination-January -2016

Cat. No: Fdqu.2104

Marks: 50.00

Title: Biochemistry of Processing and Preservation (1+1)

Time: 2 hours

I Fill up the blanks

(10 x 1=10)

1. Exudation water from the gel is known as _____
2. _____ is the common form in which SO_2 is used as a preservative
3. Complete destruction of micro organisms is called _____
4. Putrefaction means the breakdown of _____
5. Process of removing air from the cans is called _____

Define

6. Blanching
7. Denaturation
8. Rancidity
9. Maillard reaction
10. Thermal death time curve

II Write short notes on any Five questions

(5 x 2=10)

1. Explain how sugar acts as a preservative
2. Discuss on pasteurization
3. Write about electrophoresis
4. Give a note on food irradiation
5. Discuss on the principles involved in the removal of moisture from foods
6. Explain the relationship between pectin, acid and sugar in jelly formation
7. Define Beer-Lambert's law

III Write short essay on any FIVE questions

(5 x 4=20)

1. Discuss on fermentation for preservation of foods
2. Define chromatography and explain the types of chromatography
3. Discuss on the biochemical changes during storage of fruits
4. Write on the changes occurring in starch during cooking
5. Discuss on the measures to be adopted to prevent the nutrient loss during cooking
6. Explain the methods of dehydration
7. Give a note on preservatives

IV Write essay on any ONE

(1 x 10=10)

1. Explain browning reaction with ways to prevent enzymatic browning reactions
2. Explain briefly about the different methods of food freezing, along with the changes occurring during freezing and thawing