

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2013 Admission

IIIrd Semester Final Examination- December /January -2015

Cat. No: Fdqu.2104

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

Marks: 50.00

Time: 2 hours

I Fill up the blanks /True or False

(10 x 1=10)

1. In over ripe fruits pectin is converted to _____
2. The constituents of starch are _____ and _____
3. Enzyme responsible for the browning reaction in cut fruits and vegetables is _____
4. Salt is a Class _____ preservative
5. The type of fermentation taking place in vinegar manufacture is known as _____
6. Carotenoid pigments are water soluble
7. The preservative used in grape squash is benzoic acid
8. Vitamin E is a naturally occurring antioxidant
9. Germination improves the digestibility of starch
10. Washing of vegetables after cutting decrease the vitamin C content

Write short notes on any FIVE questions

(5x 2=10)

1. Physico-chemical changes occurring during freezing and thawing of fruits
2. What are the advantages of fermentation
3. List the advantages of parboiling of paddy
4. Explain osmotic dehydration
5. Advantages of blanching vegetables
6. Auto oxidation of fats
7. What do you mean by Maillard reactions

Write short notes on any FIVE questions

(5x 4=20)

1. What are the changes occurring during ripening of fruits
2. Types of cold preservation
3. Write short note on biopreservation
4. Role of biotechnology in food processing and preservation
5. Define chromatography and explain different types of chromatography
6. Explain the process of canning of fruits
7. Explain the use of irradiation in food preservation

IV Write an essay on any ONE

(1 x 10=10)

1. Explain the chemistry of enzymatic browning and the methods adopted to prevent enzymatic browning
2. Explain the different classes of preservatives used in fruit and vegetable products and their action
