

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2012 Admission

Ist Semester Final Examination- January/February -2013

Cat. No: Fdsc.1101

Title: Food science and Nutrition (2+1)

Marks: 80

Time: 3 hours

I. a. Fill in the blanks

(10x0.5 =5 marks)

1. Salt is a class preservative
2. is the enzyme causing browning the cut surface of apple
3. is the colouring pigment present in tomato
4. is used as a curing agent in meat
5. deficiency leads to goitre
6. Vitamin is known as coagulation vitamin
7. deficiency causes pernicious anaemia
8. Starch subjected to wet heat is known as
9. Spontaneous exudation of a liquid from a jelly /gel is called _____
10. is the amount of energy required to carry on the involuntary work of the body

b. Define the following

(5x1=5 marks)

1. Dextrinisation
2. Poaching
3. Scurvy
4. AGMARK
5. Angular Stomatitis

II. Write short notes on any ten

(10x3 = 30marks)

1. Write the effect of germination on pulses
2. Discuss on sources and deficiency of vitamin A
3. List out the functions of calcium
4. Discuss the following
 - a. Infantile beriberi
 - b. Wet beriberi
 - c. Dry beri

5. Define emulsions. Explain the type of emulsions
6. Discuss on stabilizers and thickeners used in food processing
7. Explain the factors affecting crystallisation of sugar
8. Iron deficiency anaemia
9. Discuss the advantages of fermentation
10. Explain the advantages and limitations of parboiling

III. Write short essays on ANY SIX of the following

(6x5=30marks)

1. What is enzymatic browning and suggest some methods for prevention of browning
2. Discuss briefly on food packaging techniques
3. Discuss the major food standards prevailed in India
4. Explain the factors affecting gelatinisation.
5. Iodine deficiency disease
6. Explain the functions, sources and deficiency of vitamin C
7. Discuss on ICMR classification of Food groups
8. What are the steps to prevent nutrient losses during cooking

IV. Write Essay on ANY ONE of the following

(1x10=10 marks)

1. What are the changes that occur during cooking of starch? Explain the factors affecting these changes?
2. What are the principles of food preservation and different preservation techniques?