

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2013 Admission

IV<sup>th</sup> Semester Final Examination-June/July -2015

Cat. No: Fden.2205

Marks: 50.00

Title: Food Processing Engineering (2+1)

Time: 2 hours

## I Define /Fill up the blanks

(10 x 1=10)

1. Mixing index
2. Blanching
3. Sterilization
4. Pasteurization
5. Dehydration
6. Refrigeration principle is used in \_\_\_\_\_ dryer
7. Unit of viscosity is \_\_\_\_\_
8. \_\_\_\_\_ is also called as cold sterilization
9. Movement of water in food drying is by \_\_\_\_\_ force
10. Heat is generated due to \_\_\_\_\_ in food material in microwave heating

## II Write short notes on any FIVE questions

(5 x 2=10)

1. Extruded products
2. Thermal death time
3. Freeze concentration
4. Psychrometry
5. Sensory characteristics of food
6. Energy conservation
7. Screw conveyor

## III Write short essays on any FIVE questions

(5 x 4=20)

1. Explain working principle of tray dryer
2. Discuss low temperature preservation
3. Explain Osmotic dehydration
4. Discuss Ohmic heating of food
5. Explain principle and working of bucket elevator
6. Discuss working of twin screw extruder with neat sketch
7. Explain high pressure processing

## IV Write an essay on any ONE

(1 x 10=10)

1. Discuss drying characteristics of food materials with suitable examples
2. Discuss equipments used for mixing solids, liquids and pastes