KERALA AGRICULTURAL UNIVERSITY
B.Tech. (Food Engg) 2019 Admission
IV Semester Final Examination- -November 2021

Fden.2205   **Food Process Engineering (2+1)**

Marks: 50
Time: 2 hours

I   **Answer the following**   (10x1=10)
   1. Define density.
   2. State law of conservation of energy.
   3. What is pasteurization?
   4. Give any one property of air.
   5. Name any one method to dry liquid food.
   Fill in the blanks
   6. _____ is a heat-sensitive vitamin.
   7. _____ conveyor is the most versatile conveying equipment.
   8. The moisture content at which the constant rate drying period end and the falling rate drying period starts is called _____
   9. _____ is the pressure that is exerted by the fluid at equilibrium due to the force of gravity.
   10. Hot extrusion is a _____ process.

II   **Write short notes on ANY FIVE of the following**   (5x2=10)
   1. Define thermo bacteriology.
   2. What are the major steps in fermentation?
   3. What is ohmic heating?
   4. Give some example for fibrous foods.
   5. Differentiate drying and dehydration.
   6. Draw the design of screw conveyor.
   7. What is mixing index?

III   **Answer ANY FIVE of the following.**   (5x4=20)
   1. What are the national and international perspective views of food processing?
   2. List the advantages, disadvantages, applications and significance of low temperature preservation of foods.
   3. Explain with flow chart about the canning process.
   4. Summarize the mechanism of drying.
   5. What is emulsification and give the application of emulsifiers with example.
   6. Describe the mechanisms and process involved in osmotic dehydration of foods.
   7. Write short note on dielectric heating of foods.

IV   **Write an essay on ANY ONE of the following**   (1x10=10)
   1. Explain hot extrusion cooking and cold extrusion cooking.
   2. Describe the irradiation preservation of food. Explain components of an food irradiational plant.

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