



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Agrl. Engg.) 2019 Admission
VI Semester Final Examination- June 2022

Fape.3207

Dairy and Food Engineering (2+1)

Marks: 50
Time: 2 hours

- I Fill in the blanks (10x1=10)**
1. Ultrasonic nozzle atomizer is used in _____drying.
 2. The viscosity of milk products _____as the concentration increases.
 3. _____is a method of preservation that makes use of sublimation, the process by which a solid passes directly to the gaseous phase without first melting.
 4. _____filtration is commonly used to pre concentrate milk prior to preparation of other range of dairy products to selectively remove lactose and salts from the whey.
 5. -----is the study of the flow and deformation of matter.
- State True or False**
6. The pH of fresh cow milk varies from 6.6 to 6.7.
 7. Diameter of the fat globules increase after homogenization and it enhances fat clumping.
 8. *Clostridium botulinum* is considered as the index organism for assessing thermal sterility in foods.
 9. Pasteurization decreases keeping quality of milk.
 10. Agitated thin film evaporators are used mostly for finishing of high viscous products
- II Write short on ANY FIVE of the following (5x2=10)**
1. Ultra filtration
 2. Cream separation
 3. Packaging of milk
 4. Types of evaporators
 5. Ice cream
 6. In-bottle sterilization
 7. Regeneration efficiency
- III Answer ANY FIVE of the following (5x4=20)**
1. Discuss about spray drying.
 2. Briefly explain about equipment used for manufacture of cheese.
 3. List briefly on chemical and biological methods of food preservation.
 4. Brief about dairy plant utilities requirement.
 5. Write about Aseptic processing.
 6. Brief explain about changes in food products during evaporation.
 7. Write about fundamental concepts of Nanotechnology.
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Write about Pasteurization of milk and discuss about HTST pasteurization.
 2. Write about different membrane separation methods.
