



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2020 Admission
VI Semester Final Examination – July 2023

Fape.3207

Dairy and Food Engineering (2+1)

Marks: 50
Time: 2 hours

- I State True or False (10x1=10)**
1. Coliforms are not destroyed during pasteurization of milk.
 2. Pasteurized milk can be stored at room temperature for two days without spoilage.
 3. According to FSSR-2011, recombined milk shall have minimum of 1.5% fat.
 4. Spores gets inactivated during sterilization of milk.
 5. According FSSR-2011, pasteurized milk shall have Total Plate Count not be more than 50,000 for all individual samples of sample lot.
 6. Homogenization reduces the cream plug formation in sterilized flavoured milk.
 7. Monitoring of critical control points is the process to minimize the hazards to safer level.
 8. Milk is chilled to 14°C at chilling center before transportation to main processing unit.
 9. Ammonia is used as a refrigerant in PHE of chiller at chilling center.
 10. Glycol is added into water to increase the efficiency of chilling.
- II Write short on ANY FIVE of the following (5x2=10)**
1. Bactofugation
 2. Plastic cream
 3. Vacuum evaporation
 4. Atomizer
 5. Microfiltration
 6. Aseptic packaging
 7. CIP
- III Answer ANY FIVE of the following (5x4=20)**
1. Explain briefly the dairy development in India and write the composition of milk.
 2. Write in physical, chemical and Biological methods of food preservation.
 3. With Neat sketch write about HTST and UHT Pasteurization.
 4. Define homogenization and explain the process along with theories.
 5. With detailed flowchart explain the manufacturing of Butter.
 6. Define Sterilization write the significance of sterilization.
 7. Write the difference between centrifugal and gravitational separation.
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Drying of milk
 2. Membrane filtration
