



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech.(Food Engg. & Technology)**  
**VIII Semester Final Re- Examination – August 2023**  
**2019 Admission**

Fden.2206

**Dairy Engineering and Technology (2+1)**

**Marks: 50**  
**Time: 2 hours**

**I Match the following**

**(10x1=10)**

- |                               |                              |
|-------------------------------|------------------------------|
| 1. 3 A Sanitary Standards     | A Cavitation                 |
| 2. Gentle treatment of liquid | B Cheese Vat                 |
| 3. Rennet enzyme              | C Lobe-rotor pump            |
| 4. Homogenization             | D Ice cream freezer          |
| 5. Double "O" type            | E Cleaning-In-Place          |
| 6. Doctors' Blade             | F Stainless Steel 18:8 grade |
| 7. 72 °C for 15 seconds       | G Gel formation in milk      |
| 8. % Over run in butter       | H HTST pasteurization        |
| 9. Dasher                     | I 20%                        |
| 10. Centralized system        | J 25%                        |
|                               | K Drum Dryer                 |
|                               | L LTLT pasteurization        |

**II Write short notes on ANY FIVE of the following**

**(5x2=10)**

1. Give classification of milk as per FSSAI.
2. Write down objectives of pasteurization.
3. Write down a short note on Homogenizing valve.
4. Write down a short note on Aseptic milk storage tank.
5. Write down a short note on Over run in ice cream.
6. Write down the criteria for selection of a land for installing a dairy plant.
7. Give the chemical composition of milk.

**III Answer ANY FIVE of the following.**

**(5x4=20)**

1. Write a short note on White revolution.
2. Write a short note on milk silo.
3. Write down a short note on can washers.
4. Write down a short note on Gravity feed milk packaging machine.
5. Write down a short note on continuous ice cream freezer.
6. Derive the equations for cream separation under gravity and centrifugal force.
7. Write a short note on UHT processing of milk.

**IV Write an essay on ANY ONE of the following**

**(1x10=10)**

1. Explain continuous butter making in detail with necessary sketch.
2. Write an essay on Spray Dryers.

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