



Fden.2206

KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engg) 2017 Admission
IV Semester Final Examination- June 2019

Dairy Engineering and Technology (2+1)

Marks: 50
Time: 2 hours
(10x1=10)

I Fill up the following blanks:

- 1 _____ is the inventor of homogenizer with 3 piston pump.
- 2 _____ part of ice cream freezer facilitates faster heat transfer by changing of ice cream film from freezer cylinder.
- 3 As per FSSAI, the toned milk shall contain _____ % fat and _____ % SNF.
- 4 The equation for calculating regeneration efficiency of HTST pasteurizer is _____
- 5 The ideal temperature for churning of cream is _____ °C.
- 6 For packaging of milk, the FFS machine stands for _____.
- 7 The over run in butter is _____ %.
- 8 When there are common cleaning solution tanks for all plant equipment connected through the network of pipes, it is called _____ CIP system.
- 9 In drum dryers, the knife fixed for scraping the dried milk film is called _____
- 10 _____ pump is most suitable for handling the aerated liquid returning from CIP lines.

II Write Short notes on any FIVE of the following

(5x2=10)

- 1 Chemical composition of milk.
- 2 Advantages of HTST pasteurization over LTLT pasteurization.
- 3 Aseptic tank.
- 4 Method of manufacturing processed cheese.
- 5 Different stages of straight through can washer.
- 6 Softy ice cream making.
- 7 Criteria for selection of a land for installing a dairy plant.

III Answer any FIVE of the following.

(5x4=20)

- 1 Dairy Development in India.
- 2 Milk storage tanks.
- 3 Derive the equations for cream separation rate under gravitational force and centrifugal force.
- 4 UHT processing of milk.
- 5 Atomizers in spray drying plant.
- 6 Can washers.
- 7 Continuous ice cream freezer.

IV Answer any ONE of the following

(1x10=10)

1. HTST pasteurizer with all its components and functions.
2. Cheese making equipment with neat diagram.
