



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engg) 2016 Admission
IV Semester Final Examination-July 2018

Fden.2206

Dairy Engineering and Technology (2+1)

Marks: 50
Time: 2 hours

I Fill up the following blanks:

(10x1=10)

- 1 Raw milk has to be processed within hours to avoid spoilage
- 2 Milk is an.....emulsion
- 3 Sterilization efficiency was analyzed bytest
- 4is responsible for the yellow colour of butter
- 5is defined as the volume of ice cream obtained in excess of the volume of the mix
- 6 Rennet contains andenzymes
- 7 is a process by which dried milk products are made instant soluble
- 8 Homogenization increases the whitening power of milk because of
- 9rays used in manufacture of irradiated milk

II Write Short notes on any FIVE of the following

(5x2=10)

- 1 Principles of pasteurization
- 2 Tunnel freezer
- 3 Over run in Butter
- 4 Stages in can washing.
- 5 Nutritive value of milk
- 6 Agglomeration
- 7 Corrosion control

III Answer any FIVE of the following.

(5x4=20)

- 1 Various cooling methods used in dairy industry
- 2 Direct heating of UHT processing
- 3 Effect of homogenization of milk
- 4 Compare: clarifiers and separators
- 5 Manufacturing method of flavored milks
- 6 Differentiate: centralized and de-centralized CIP systems
- 7 Illustrate: working principle of drum drier with diagram

IV Write an essay on any ONE of the following

(1x10=10)

1. With neat diagram explain the components and working principle of spray drier
2. Consider you are a R&D manager in Amul. You are assigned to develop a new flavored cheddar cheese. Prepare and submit the detailed manufacturing method of your own choice flavored cheddar cheese with neat flow sheet.
