



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.
