

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) Degree Programme 2014 Admission  
IV<sup>th</sup> Semester Final Examination- June-July -2016

Cat. No: Fden.2206

Title: Dairy Engineering and Technology (2+1)

Marks: 50

Time: 2 hours

I Answer the following

(10 x 1.0 =10.0)

Fill up the blanks

1. Breaking of fat globule is known as -----.
2. SNF stands for -----
3. ----- is the principal constituent of cheese.
4. ----- is commonly used heat exchanger in dairy industry.
5. Freezing point of milk is ----- °C

State the following statement True (or) False

6. The enzyme extracted from stomach calf and used in cheese making is casein.
7. Whey is the byproduct in the manufacturing of cheese.
8. Butter contains 60 per cent of milk fat.
9. UHT stands for Ultra high temperature
10. Churning improves the textural characteristics of butter.

II Answer any FIVE questions

(5 x 2 =10.0)

Define/Explain

1. Double toned milk.
2. Churning efficiency.
3. Stoke's law.
4. bactofugation
5. Reverse osmosis
6. Skimmed milk
7. HTST pasteurizer

III Answer any FIVE questions

(5 x 4.0 =20.0)

1. Write a note on milking practices.
2. Explain ultra filtration
3. Explain the principle and working of cream separators.
4. Write short notes on theory of churning.
5. Explain the working of plate heat exchanger.
6. Briefly explain clean milk production
7. Write a note on bulk milk cooler.

IV Answer any ONE question

(1 x 10.0 =10.0)

1. Classify the pasteurization methods and explain any two methods.
2. What is cheese? Write the classification and composition of cheese. Explain the manufacturing process of cheddar cheese.

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