

# KERALA AGRICULTURAL UNIVERSITY

B.Tech.(Food Engg.) 2015 Admission

IV Semester Final Examination – July - 2017

Marks: 50

Time : 2 hours

C.C. No: Fden 2206

Title: Dairy Engineering and Technology(2+1)

(10 x 1=10)

## I. Fill up the blanks:

1. The specific gravity of milk fat is -----
2. The process of reducing fat globule size in milk to prevent cream separation is known as -----
3. The disk stack of a cream separator rotates with the bowl at around ----- rpm.
4. In study of pumps, NPSH stands for -----
5. The fat percentage in Indian Butter is about -----
6. LTLT pasteurization of milk has a time-temperature combination of -----
7. According to FSSAI standards, skim milk should have a fat content of -----and an SNF content of -----
8. The emulsifier used in the preparation of ice cream is -----
9. In a drum dryer, the dried particles are removed from the drum surface by a knife known as -----
10. The power requirement of a homogenizer(E), whose homogenizing pressure (p), and volume flow rate (Q) are known, can be expressed as -----

## II. Write short notes on ANY FIVE:

(5x 2=10)

1. Operation Flood
2. Paring disc
3. Cheese
4. Regeneration efficiency
5. Fouling
6. Booster pump
7. Toned milk

## III Write answers on ANY FIVE:

(5 x 4=20)

1. Flow Diversion Valve
2. Vapour recompression
3. Cleaning-in-place
4. Aseptic Packaging
5. Continuous Butter Making Machine
6. Spray Drying
7. Vaccination

## IV. Write essay on any ONE

(1 x 10=10)

1. Explain the construction and working of an HTST pasteurizer with a neat schematic diagram.
2. Explain the construction and working of a homogenizer with a neat schematic diagram.