(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID: 182612

Roll No.

B.TECH.

Theory Examination (Semester-VI) 2015-16

DAIRY TECHNOLOGY

Time: 3 Hours Max. Marks: 100

Section-A

- Q1. Attempt all parts. Write answers of each part in short. $(10\times2=20)$
 - a) What do you mean by titrable acidity of milk?
 - b) Enlist various types of platform test?
 - c) Enlist the factors affecting composition of milk.
 - d) Name any four enzymes present in milk.
 - e) What do you understand by neutralization of cream?
 - f) Give composition of milk.

(1) P.T.O.

- g) What do you mean by homogenization of milk?
- h) Differentiate between filtration and clarification.
- i) What is bactofugation?
- i) What is over run in ice-cream?

Section-B

Q2. Attempt any five questions.

 $(10 \times 5 = 50)$

- (a) Explain HTST pasteurization of milk in detail. Discuss its advantages.
- (b) Explain the method of manufacture of cream, support the answer with a flow diagram.
- (c) Discuss the role of various ingredients in ice cream. Explain the significance of aging of ice-cream mix.
- (d) Give the classification of butter. Explain the objectives of washing, salting, and working in making of butter.
- (e) Discuss the cleaning and sanitization of dairy plants.
- (f) With the help of a neat flow sheet discuss the methods of manufacture of condensed milk.

- (g) Explain the manufacture of lactose from whey. Write down the uses of lactose.
- (h) Explain the process of spray drying of milk. Discuss the advantages of spray drying of milk over roller drying.

Section-C

Attempt any two questions.

(15X2=30)

- Q3. Discuss the process of instantiation of dried milk powder. Explain the term reconstituability, dispersibility, and sinkability.
- Q4. What do you understand by standardization of milk? Explain pearson's square method of standardization of milk. How many kg of each 28 % cream and 3% milk be required to make 500 kg of mixture of 4% fat?
- **Q5.** What are the industrial uses of casein? Explain the method of manufacture of casein.

(3) P.T.O.