

B.Tech,
2022
5th Sem

ROLL NO- _____

B.TECH FOOD TECHNOLOGY
Semester V End Semester Examination 2022
Course Code- BFTC-501
Course Title: Dairy Technology

TIME: 3 hours

Max. Marks: 75

Note: 1. It is compulsory to answer all the questions of Section-A.
2. Answer any four questions in Section- B.

Section-A (35 marks)

Q1. Short answer type questions:

- a. Define reconstituted milk and recombined milk. (2M)
- b. What role do positive displacement pumps have in milk homogenization? (2M)
- c. State Stoke's law. (2M)

Q2.

- a. Expand the following: COB, MBRT, FSSA, LTLT (4M)
- b. State two classes of neutralizers used for neutralization of cream stating their advantages and disadvantages. (4M)
- c. State with examples, the role of stabilizers & emulsifiers in ice cream preparation (4M)

Q3.

- a. Mention different defects related to butter, their causes and prevention. (4M)
- b. Elaborate on the theories of milk homogenization with their relevance. (4M)

Q4.

- a. Differentiate between Set yoghurt and Stirred yoghurt. (2M)
- b. State factors affecting yield and composition of milk. (3M)
- c. Give a brief account of the platform tests to assess quality of raw milk. (4M)

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Section- B (4*10=40 marks)

Any four

1. State regulatory standards for sweetened condensed milk. Briefly define forced crystallization. How much sugar must be added to milk to give 42% sugar in condensed milk, if fresh milk contains 12.5% TMS and condensed milk contains 30% TMS ?
2. Classify types of khoa on the basis of moisture content. Describe process technology of any one khoa based product in detail.
3. Draw a line diagram showing manufacture of cheddar cheese. State process parameters clearly.
4. What are the legal standards for spray dried milk? Define atomization. Give a schematic representation of a spray drier with cyclone separator and its purpose.
5. Write a short note on any four:
 - a. Precipitation of casein
 - b. Overrun
 - c. Ripening of cheese
 - d. Pre-stratification process
 - e. Two-axis pricing policy of milk

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