Roll No. Total No. of Pages: 02

Total No. of Questions: 09

M.Sc. (Food Techonolgy) (2018 Batch) (Sem.-2)

DAIRY TECHNOLOGY

Subject Code: MSFT-521-18

M.Code: 75948

Time: 3 Hrs. Max. Marks: 70

INSTRUCTIONS TO CANDIDATES:

- 1. SECTION-A contains SEVEN questions carrying TWO marks each and students has to attempt any ALL questions.
- SECTION-B consists of FOUR Subsections: Units-I, II, III & IV. Each Subsection contains TWO questions each carrying FOURTEEN marks each and student has to attempt any ONE question from each Subsection.

SECTION-A

1. Answer briefly:

- i) Define overrun in ice-cream.
- ii) What is the difference between 'Toned milk' and 'Double toned milk'?
- iii) What are milk proteins? Give examples.
- iv) Write down the composition of butter.
- v) What is the purpose of Clot-on-Boiling test?
- vi) Define 'Rennet'.
- vii) Enlist different major constituents of milk.

SECTION-B

UNIT-I

- 2. Write short notes on the followings:
 - i) Scope of dairy industry in India
 - ii) Composition of milk

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3. Define milk. Write detailed note on various milk enzymes along with their specific actions. Also discuss the enzymatic and acid coagulation of milk.

UNIT-II

- 4. Define condensed milk. Discuss the different types of condensed milks along with their composition. Also explain the process of manufacturing, packaging and storage of condensed milk.
- 5. Write a short note on:
 - i) Types of membranes used for the membrane processing of milk
 - ii) Instantization of milk powder

UNIT-III

- 6. Define cheese. Discuss in detail the classification of cheese along with suitable examples. Also explain the manufacturing process of Cheddar cheese along with a suitable flow diagram.
- 7. What are Indigenous milk products? Give examples. Discuss in detail the composition and methods of preparation of 'Ghee' along with flow diagram.

UNIT-IV

- 8. Write short notes on:
 - i) Milk and milk products standards and legislation in India
 - ii) Whey Protein Concentrate
- 9. What do you understand by dairy plant sanitation? Write down the importance of hygiene in dairy industry. Discuss in detail the different types of cleansing and sanitizing agents used in dairy industry along with their applications.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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