# Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice.

# ACHARYA INSTITUTE OF TECHNOLOGY Bangalore - 560090

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# Seventh Semester B.E. Degree Examination, Dec.2016/Jan.2017 Dairy BT

Time: 3 hrs.

Max. Marks:100

Note: Answer FIVE full questions, selecting at least TWO questions from each part.

### PART - A

- 1 a. Write a note on direct and indirect methods of assessment of microbial quality of milk.
  - Give general characteristics and layout for a diary plant. (12 Marks)
    (08 Marks)
- 2 a. Discuss the impact of advances in genetic engineering on dairy industry. (12 Marks)
  - b. Write a note on spoilage of milk microorganisms. (08 Marks)
- Write notes on:
  - a. Important groups of microorganisms present in milk.
  - b. Applications of Enzymes in dairy industry.
  - c. Homogenizers used in dairy industry.
  - d. Porch filling activity for milk and milk products

(20 Marks)

- 4 a. Enlist and discuss various methods of sanitization procedures employed in a milk processing unit. (10 Marks)
  - b. What is Pasteurization? Discuss in detail Batch, Flash and continuous methods of Pasteurization. (10 Marks)

## PART - B

- 5 Write note on
  - a. Type of evaporators used in dairy industry
  - b. Automization unit and process
  - c. Material management in a dairy plant
  - d. Good Hygiene practices.

(20 Marks)

- 6 a. With suitable examples, discuss various drying techniques used for dairy products. (12 Marks)
  - b. Write a note on applications of membrane processing in a dairy plant. (08 Marks)
- Write notes on:
  - a. Heating and Ventilation (HVAC) System.
  - b. Why processing and utilization
  - c. Public awareness on quality and safety of dairy foods.
  - d. Classification of dairy plants.

(20 Marks)

- 8 a. Elaborate the quality guidelines and food safety system as applicable to milk production and processing unit. (12 Marks)
  - b. Write a note on waste water treatment process for a dairy plant.

(08 Marks)

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