

2022
2nd Gen.

Roll No. _____

M.Tech. Food Technology
Semester II-End Examination 2022
Course Code: MFTC-204
Course Title: Dairy Technology and Engineering

Time: 3 hours

Max Marks: 75

Attempt all the questions. Marks are mentioned against each question

- Q1. Briefly answer the following (1x15)
- (a) Is CMC an emulsifier or stabilizer? Mention respective function & application.
 - (b) Define TDT.
 - (c) What happens when condensed milk is stored below 0°C.
 - (d) Match the following: (Write answers on sheet)
- | A | B |
|-------------------|---------------------|
| a. Triplex pump | i. Homogenized milk |
| b. UHT processing | ii. HEPA filter |
| c. Auto-oxidation | iii. FFA |
| d. Regeneration | iv. PHE |
- (e) Lyophilization is another term used for:
 - a. Vacuum drying
 - b. Osmotic drying
 - c. Freeze-drying
 - d. Drum drying
 - (f) Which material the pressure nozzle atomizers are made of:
 - a. Tungsten carbide
 - b. Iron
 - c. Steel
 - d. Chromium
 - (g) Maximum possible over-run in ice cream is:
 - a. 25%
 - b. 50%
 - c. 75%
 - d. 100%
 - (h) Major flavouring compound present in Dahi is:
 - a. Acetone
 - b. Acetaldehyde
 - c. Diacetyl
 - d. Methylketones
 - (i) The method and level of salting in cheese has a major influence on:
 - a. pH
 - b. Proteolysis rate
 - c. Lipolysis rate
 - d. FFA content
 - (j) Which of the following products are characterized by layers of clotted cream?
 - a. Rabri
 - b. Kalakand
 - c. Kheer
 - d. Burfi
 - (k) Which of the following is a coagulating enzyme?
 - a. Lipase
 - b. Lactase
 - c. Amylase
 - d. Chymosin
- Q2. Write brief account on any three of the following (5x3)
- (a) HTST pasteurization
 - (b) Theories of homogenization
 - (c) Platform tests
 - (d) Designated milks
 - (e) Milk chemistry
- Q3. Write brief account on any three of the following: (5X3)
- (a) Process technology of processed cheese.
 - (b) Operation and design of vacuum pan