



THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

CHE 3211

DAIRY CHEMISTRY

Time: 2 Hours

Max Marks: 60

Answer any FOUR questions

4 X 15 = 60

1. a) What are the constituents of milk? (5)
b) Discuss in detail about the estimation of the following components in milk; i) fat
ii) total solids. (10)
2. a) Describe in detail about the physico-chemical changes of milk during processing. (8)
b) Explain vacuum and ultra high temperature pasteurization. (7)
3. a) How will you estimate acidity and moisture content present in butter? (5)
b) What is special milk? Illustrate the manufacturing of it with a flow diagram. (7)
c) What do you mean by nutritive value? (3)
4. a) Discuss in detail about the following:
i) Fermentation of milk ii) Milk powder making (8)
b) Give the preparation of Khoa and Chhana sweets. (7)
5. a) What are the factors affect the composition of milk? Explain in detail. (6)
b) How do microorganisms in milk destroyed? Give any two neutralizers of milk. (6)
c) What do mean by Recknagel's effect? (3)
6. a) How does cream separated from milk using gravitational and centrifugal methods. (8)
b) Discuss elaborately about ice cream manufacturing. (7)
