

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMESTER END THEORY EXAMINATION, B. Tech. (Dairy Technology)

Semester	: II (VI Dean)	Academic Year	: 2024-2025
Course No.	: DT - 1201	Course Title	: Market Milk
Credits	: 3+1=4	Total Marks	: 40
Day & Date	: Thursday; 07/08/2025	Time	: 2.00 hrs.

- Note:** 1) All questions from **Section 'A'** are compulsory.
2) Solve **Any FIVE** questions from **Section 'B'**.
3) Draw neat and well-labeled diagrams wherever necessary.

SECTION - 'A'

- Q. 1 Define the following. (05)
- Degree of homogenization
 - Bactofugation
 - Platform tests
 - Farrall index
 - Vacreation
- Q. 2 State whether True or False. If false, rewrite the statement after making necessary corrections in underlined word. (05)
- Alcohol test is performed to check the suitability of milk for UHT process.
 - Homogenized milk is more susceptible to oxidized flavor development.
 - As per FSSAI, permissible level of urea in milk is NLT 700 ppm.
 - The time required to reduce a microbial population by 90% at a specific temperature is called as D - value.
 - Sodium Hexametaphosphate is used as a softening agent.
- Q. 3 Choose the most appropriate answer from the options given below. (05)
- The purpose of using Tri-process cream separator is
 - Standardization
 - Separation
 - Clarification
 - All of these
 - The means for removing large sized particles from milk is
 - Clarification
 - Centrifugation
 - Bactofugation
 - Straining
 - The chemical name for calgon is
 - Tripotassium phosphate
 - Sodium metasilicate
 - Sodium hexametaphosphate
 - Trisodium phosphate
 - Dye reduction tests have their basis in the reduction of compounds in milk by microbial
 - Colonies
 - Compounds
 - Enzymes
 - Secretions
 - The material used for insulation is
 - Glass wool
 - Cork board
 - Thermo Cole
 - All of these

SECTION –‘B’

- Q. 4 Discuss importance and methods of raw milk chilling in detail. (05)
- Q. 5 What is pasteurization? Discuss HTST pasteurization with neat diagram. (05)
- Q. 6 Write short notes on.
- A) Bactofugation (2.5)
 - B) LP system (2.5)
- Q. 7 A) State the objectives and drawbacks of homogenization process. (2.5)
- B) Define aseptic packaging and discuss its importance. (2.5)
- Q. 8 A) Discuss the effect of homogenization on milk properties. (02)
- B) Write down the importance and application of thermization process. (02)
- C) Enlist the various factors affecting cream separation. (01)
- Q. 9 State the FSSAI standards of special milks and discuss in detail the manufacturing process of any one along with flow chart. (05)
- Q. 10 Discuss direct and indirect UHT plants. (05)
