

D 130676**(Pages : 2)****Name.....****Reg. No.....****FIFTH SEMESTER B.VOC. DEGREE EXAMINATION, NOVEMBER 2025****Dairy Science and Technology****SDC5DT29—OPERATION AND MAINTENANCE OF DAIRY MACHINERIES****(2021 Admissions)****Time : Two Hours****Maximum : 60 Marks****Section A***All questions can be answered.**Each question carries 2 marks.**Ceiling 20 Marks.*

1. What is meant by milk reception ?
2. Describe the purpose of a bulk milk cooler in a dairy plant ?
3. What is the working principle of can washer ?
4. What are the different types of heat exchangers used in dairy machinery ?
5. How does a refrigerated storage tank benefit milk preservation.
6. How do plate heat exchangers work ?
7. What is meant by a pasteurizer ?
8. Name the sterilizing equipments used in dairy industry ?
9. Discuss on Flow Diversion Valve
10. List out the different types of Milk Storage Tanks
11. What are the components of HTST pasteurizer ?
12. What is the principle of cream separator ?

Section B (Paragraph)*All questions can be answered.**Each question carries 5 marks.**Ceiling 30 Marks.*

13. What are the parts of cream separator? Discuss in detail
14. Write a note on Tubular Heat Exchanger with suitable diagram

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15. Identify common faults in UHT milk and their causes ?
16. Explain about self- desludging clarifiers.
17. Compare direct and indirect heating systems in dairy processing, highlighting their advantages and limitations.
18. Evaluate the effectiveness and exchange efficiency of heat exchangers in dairy processing units.
19. Evaluate the role of aseptic processing and filling in maintaining milk quality and extending shelf life in the dairy industry.

Section C (Essays)

*Answer any **one** of the following.*

The question carries 10 marks.

20. Write an essay on condensing and drying equipments, (working principle, equipments used and their maintenance)
21. Discuss the various methods employed for measuring milk received through cans and tanks in dairy processing.

(1 × 10 = 10 marks)