

D 130672**(Pages : 2)****Name.....****Reg. No.....****FIFTH SEMESTER B.VOC. DEGREE EXAMINATION, NOVEMBER 2025****Dairy Science and Technology****SDC5DT25—DAIRY PLANT DESIGN AND LAYOUT****(2021 Admissions)****Time : Two Hours****Maximum : 60 Marks****Section A***All questions can be answered.**Each question carries 2 marks.**Ceiling 20 Marks.*

1. How can proper hygiene help in preventing milk spoilage ?
2. How do safety and sanitation requirements impact the layout of a dairy plant ?
3. How often should drain cleaning and maintenance be carried out in a dairy plant ?
4. What types of roofing material is suitable for a dairy plant ?
5. What are some benefits of multi level design for a dairy plant ?
6. What are the properties for building materials for a dairy plant ?
7. What are the best materials for milk piping in a dairy plant ?
8. What are the primary requirements for a dairy floor finisher ?
9. What are the minimum space requirements for a small scale dairy plant ?
10. What is the role of insulation materials in the construction of a dairy plant ?
11. What are the advantages of using Steel for constructing a dairy plant ?
12. What is the ideal slope for drains in a dairy plant ?

Turn over

Section B (Paragraph)

All questions can be answered.

Each question carries 5 marks.

Ceiling 30 Marks.

13. What are the factors to be considered while selecting lighting for a dairy plant ?
14. What are some common challenges associated with locating dairy plants in rural areas ?
15. What are the safety requirements for a dairy plant ?
16. What are the common methods for fly control in a dairy plant ?
17. How do we prevent growth of bacteria in milk piping and other equipments ?
18. Evaluate the importance of flexibility in office layouts within dairy plants.
19. What are the benefits of proper ventilation in a dairy plant ?

Section C (Essays)

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

The question carries 10 marks.

20. What are the key design considerations that must be taken into account while implementing each type of floor plan for a dairy plant ?
21. Draw the layout of a single product dairy :
 - a) Butter ; and
 - b) Cheese.

(1 × 10 = 10 marks)