

End Semester Examinations - 2015-16 Even Semester - May 2016

14FP2006 Dairy Engineering and Technology

Set A

Time : 3 hrs
Total Marks: 100

1. Explain in detail with flowchart and schematic diagram the following:
 - a) HTST Process (7 Marks)
 - b) Double stage homogenizer (7 Marks)
 - c) Vacuum Pasteurization (6 Marks)
- OR**
2.
 - a) Define Milk. Write down its composition, properties and uses of some milk constituents. (15Marks)
 - b) Write note on application of enzymes in dairy industry. (5Marks)
3.
 - a) Explain the working principle of cream bowl centrifuge with neat diagram. (10Marks)
 - b) Derive an equation to determine the rate of flow of milk in a centrifugal cream separator. (10Marks)
- OR**
4. Explain with a neat sketch the working principle of the following:
 - a) Centrifugal Pumps (7Marks)
 - b) Positive displacement Pumps (7Marks)
 - c) Atomizers used in Spray Dryer (6Marks)
5.
 - a) Enumerate in detail various steps in Butter manufacture with process flowchart. (12Marks)
 - b) Differentiate between Pindi Khoa and Danedar Khoa. (4Marks)
 - c) Write the flowchart for manufacture of Paneer. (4Marks)
- OR**
6.
 - a) Enumerate in detail the process of manufacturing of cheddar cheese using flowchart.(12Marks)
 - b) Briefly explain the process of manufacturing of ghee using flowchart. (8Marks)
7.
 - a) What are Fermented products? Discuss the importance of fermented dairy products. (5Marks)
 - b) Explain in detail the production of any two fermented products from milk. (15Marks)
- OR**
8.
 - a) Give the detailed process flowchart for the manufacture of lactose. (12Marks)
 - b) Discuss the manufacturing process of whey products. (8Marks)
9.
 - a) Discuss in detail about the importance and application of Probiotic dairy foods in daily life. (10Marks)
 - b) Explain in detail with schematic diagram any two commonly used equipments used in dairy industry. (10Marks)