

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: IMSc  
BRANCH: FOOD TECHNOLOGY**

**SEMESTER : VI  
SESSION : SP/2023**

**SUBJECT: FT308 DAIRY TECHNOLOGY**

**TIME: 3 Hours**

**FULL MARKS: 50**

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Explain the major challenges for dairy industry.	[5] 1	2
Q.1(b)	Enumerate the recent developments and future prospects of dairy industry.	[5] 1	2
Q.2(a)	Describe the process of milk powder production	[5] 2	2
Q.2(b)	Explain the working principle of homogenizer machine. Distinguish the effects of roller and spray drying on mill powder.	[5] 2	2,4
Q.3(a)	Define cholesterol and describe the status of lipid in milk and state the general composition of milk fat.	[5] 3	1,2
Q.3(b)	Define butter. Explain the different methods of ghee preparation and classify different types of ice-creams in brief.	[5] 3	1,2
Q.4(a)	Explain the process of cheddar cheese curd making.	[5] 4	2
Q.4(b)	Enumerate the manufacturing process of yoghurt along with its flow chart diagram.	[5] 4	2
Q.5(a)	Explain the cleaning variables and disinfection process in dairy industry.	[5] 5	2
Q.5(b)	Explain the principle of packaging materials.	[5] 5	2

:25/04/2023:M