

2023

Food Product Technology–III (Milk & Milk products)

Full Marks: 100

Time: Three hours

*The figures in the margin indicate full marks for the questions.**Answer any five questions.*

1	a)	Give the chart showing the constituents/composition of milk	6
	b)	Mention the factors (any four) affecting the composition of milk.	4
	c)	Write short notes on milk protein and sugar.	10
2	a)	Give details about the density and specific gravity of milk.	10
	b)	Write about the different cooling methods used for the safe storage of milk.	10
3	a)	Give details about the following tests: (i). Acidity test (ii) Resazurin test (iii) Lactometer test	3+4+3=10
	b)	Write brief notes on the working mechanism of HTST pasteurizer with suitable diagram.	10
4	a)	Explain the process of milk homogenization with suitable diagram.	10
	b)	Write about any one of the processes for the manufacturing of soy milk with proper flow chart.	10
5	a)	Give the schematic representation of centrifugal milk separator.	6
	b)	Briefly explain about the mechanical washing of bottles with suitable flow chart.	10
	c)	Define the term-CIP. Write the merits of CIP.	2+2=4
6	a)	Explain the manufacturing process of flavoured milk with proper flow chart.	10
	b)	Give the flow chart for the following products: (any two) (i). Standardized milk (ii). Reconstituted milk	5+5=10

		(iii). Toned milk (iv). Recombined milk	
7	a)	Explain about the manufacturing process of cream with proper flow chart and mention about its shelf life.	10
	b)	Briefly explain the production process of any one of the fermented milks with suitable flow chart and give details on its packaging.	10

