# FOOD PRODUCT TECHNOLOGY – II

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks for the questions.

## PART – A

## Marks – 25

Answer the following questions :

1. Define 'market milk'. 2

2. The usual temperature range of pre-heating for market-milk is ———— $^{o}C$. 2

3. ———— refers to adjustment of SNF % in milk to a desired value. 1

4. The range of pressure used in homogenization is ————. 2

[Turn over

5. Butter contains ———% milk fat and about ———% moisture. 2

6. The particle size of spray-dried milk powder is ——— μm. 1

7. ——— and ——— should not be present in baby foods. 2

8. Define Extrusion. 2

9. Write two objectives of Homogenization. 2

10. As per PFA rule, cream should not have less than ———% milk fat. 2

11. Write the formula for calculation of % over-run in ice-cream making . 2

12. The brix value after clarification stage in sugar cane processing is ———. 2

13. Functions of $CO_2$ and acids in carbonated beverage are ——— and ——— respectively. 1.5+1.5=3

## PART – B

### Marks – 45

1. Explain about the 'cooling and storage' stages in market milk processing.   5

2. Explain the processing of butter or cheese.   5

3. Describe the drum-drying and spray-drying processes in milk powder processing.   3+3=6

4. Describe the processes of ageing and freezing in ice-cream processing.   2+2=4

5. Describe the principle of Baking.   5

6. Explain the working of Extruder.   5

7. Write notes on any *three* :   5×3=15

    (a)   Making of egg-powder

    (b)   Egg-based products (any three)

    (c)   Meat-based products (any three)

    (d)   Fish-based products (any three)

(e) Any two steps of refining in sugar-cane processing

(f) Starch derivatives/modified starch

(g) Any four ingredients used in baking and their functions

(h) Homogenizer

(i) Baby foods

(j) Breakfast cereals

(k) Indigenous dairy products

(l) Indigenous starch-based foods.