Total number of printed pages: 2

D/5th/DFET502

2024

FOOD PRODUCT TECHNOLOGY-II

Full Marks : 100

Time : Three hours

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

*Answer **any five** questions.*

1. a) Fill in the blanks 1×5=5

   i) The sugar found only in milk is _____.

   ii) Milk is an _____ type emulsion.

   iii) The fat in milk exist in the form of small globules having a size in the range of _____.

   iv) _____ pigment present in milk give yellow colour to milk.

   v) Milk is deficient in vitamin _____.

   b) Write the full form (**any five**) 1×5=5

   i) PFA

   ii) COB

   iii) SNF

   iv) MBRT

   v) ALP

   vi) LTLT

   vii) HTST

   c) Write the PFA standard for **any four** of the followings; cow milk, buffalo milk, goat milk, toned milk, double toned milk, skim milk and standardized milk. 4

   d) Name the three types of phospholipids found in milk. 3

   c) What is platform test? What is its objective? 3

2. a) Describe the production of cream with flowchart with detail explanation of 10

the cream separation from milk. Give a suitable diagram of cream separator.

b) Write the composition of butter. What should be the fat percentage of cream for butter production? 2+1=3

c) What is ripening of cream in butter making? Name the starter culture used during ripening. 1+2=3

d) What changes occur during ageing and churning of cream during butter processing. 2+2=4

3. a) Describe the structure with different parts of an egg with suitable diagram. 10

b) Mention some physical and chemical changes that occur when egg deteriorates during storage. 3+3=6

c) Describe any one method of evaluation of egg quality. 4

4. a) Enlist six factors that affect the yield of milk and its composition. 6

b) What are the objectives of pasteurization? 2

c) What is standardization of milk? How many kg by weight of 40% cream and 3% milk must be mixed to make milk of 500 kg by weight testing 5% fat? 1+4=5

d) Define homogenization of milk. Explain the principles and stages of homogenization of milk. 2+3+2=7

5. a) Write the functions of the essential and optional ingredients used in bread making. 12

b) Describe the straight dough and sponge dough methods of bread making. 4+4=8

6. Write short notes on 5×4=20

a) Post mortem changes in meat

b) Ageing of meat

c) Tenderizing of meat

d) Preservation of meat

7. a) Classify the fish and give examples. 8

   b) Write any four points used to identify the freshness of a fish. 4

   c) Differentiate between 2×4=8

      i) Condensed milk and evaporated milk

      ii) Skim milk powder and whole milk powder

      iii) Crust and crumb of bread

      iv) Lactose intolerance and gluten intolerance

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