

National Testing Agency

Question Paper Name :	Dairy Technology 21st March 2024 Shift 2
Subject Name :	DAIRY TECHNOLOGY
Creation Date :	2024-03-21 16:44:24
Duration :	105
Total Marks :	300
Display Marks:	Yes

Dairy Technology

Group Number :	1
Group Id :	878270633
Group Maximum Duration :	0
Group Minimum Duration :	105
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	300
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Dairy Technology

Section Id :	8782701090
Section Number :	1

Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 75
Number of Questions to be attempted : 75
Section Marks : 300
Enable Mark as Answered Mark for Review and Clear Response : Yes
Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 8782701980
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 1 Question Id : 87827052264 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1

Match **List-I** with **List-II**

List-I	List-II
(Defects in Ice cream)	(Cause for Defects)
(A). Bitter	(I). Due to use of excessive or poor quality flavouring material.
(B). High flavour	(II). Using low quality ingredients, especially flavour dairy products etc.
(C). Acidic	(III). Using synthestic or imitation flavours in excessive quantity.
(D). Unnatural	(IV). Due to use of sour dairy products.

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Options :

- 878270205641. 1
- 878270205642. 2
- 878270205643. 3
- 878270205644. 4

Question Number : 2 Question Id : 87827052265 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

What is the best pH range for the growth of most of the bacteria in milk and milk products?

- 1. 5 to 6
- 2. 6.0 to 7.7
- 3. 8 to 9
- 4. 3 to 5

Options :

- 878270205645. 1
- 878270205646. 2
- 878270205647. 3
- 878270205648. 4

Question Number : 3 Question Id : 87827052266 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

How will you detect the presence of hydrogen peroxide in milk?

1. When adulterated milk is treated with ferric chloride solution and concentrated sulphuric acid, violet colour will develop at the junction of two layers.
2. When adulterated milk is treated with para-phenylenediamine hydrochloric acid, it will give dark blue colour.
3. When adulterated milk is treated with HCl and Resorcinol powder and then subsequently boiling the mixture in water bath, it will give red colour.
4. By measuring lactometer reading.

Options :

878270205649. 1

878270205650. 2

878270205651. 3

878270205652. 4

Question Number : 4 Question Id : 87827052267 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

How will you detect the presence of Formaldehyde in milk?

1. When adulterated milk is treated with HCl and Resorcinol powder and boiling the mixture in water it will give red colour
2. When adulterated milk is heated, cooled and added with 1% iodine solution, it will become blue coloured.
3. When adulterated milk it is treated with para-phenylenediamine hydrochloric acid, it will give dark blue colour.
4. When adulterated milk is treated with ferric chloride solution and concentrated sulphuric acid, violet colour will develop at junction of two layers .

Options :

878270205653. 1

878270205654. 2

878270205655. 3

878270205656. 4

Question Number : 5 Question Id : 87827052268 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Late blowing (bulging of cans) defect in canned foods is caused by -----

1. *Clostridium foetidum*
2. *Coliform*
3. *Bacillus cereus*
4. *Bacillus subtilis*

Options :

878270205657. 1

878270205658. 2

878270205659. 3

878270205660. 4

Question Number : 6 Question Id : 87827052269 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Cheese cancer of Swiss and similar cheeses is caused by

1. *Oospora caseovorans*
2. *Oospora aurianticum*
3. *Oospora crustacea*
4. *Oospora caseovorans and Oospora aurianticum*

Options :

878270205661. 1

878270205662. 2

878270205663. 3

878270205664. 4

Question Number : 7 Question Id : 87827052270 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1

Ester like flavours in butter are resulted due to the action of _____

1. *Pseudomonas mephitica*
2. *Pseudomonas fragi*
3. *Aeromonas hydrophila*
4. *Pseudomonas synxantha*

Options :

878270205665. 1
878270205666. 2
878270205667. 3
878270205668. 4

Question Number : 8 Question Id : 87827052271 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1

A yellow colour in the creamy layer of milk may be caused by

1. *Serratia marcescens*
2. *Aeromonas hydrophila*
3. *Pseudomonas syncyanea*
4. *Pseudomonas synxantha*

Options :

878270205669. 1
878270205670. 2
878270205671. 3
878270205672. 4

Question Number : 9 Question Id : 87827052272 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1

Following steps are involved in the preparation of _____

- A. Reception of buffalo milk
 - B. Pre-heating and filtration (35-40⁰C)
 - C. Standardization (5.5 to 6% fat and 9% SNF)
 - D. Open pan condensing till obtaining pindi type khoa
 - E. Heat pindi Khoa
 - F. Addition of sugar (@30% of khoa or 6% of milk)
 - G. Kneading of sugar with a wooden kneader (60⁰C)
1. Peda
 2. Burfi
 3. GulabJamun
 4. Rabari

Options :

- 878270205673. 1
- 878270205674. 2
- 878270205675. 3
- 878270205676. 4

Question Number : 10 Question Id : 87827052273 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 4 Wrong Marks : 1

Excess fermentation of butter or addition of old butter to fermented cream leads to _____ flavour defect in Ghee.

1. Acidic
2. Curdy
3. Rancid
4. Smoky

Options :

878270205677. 1

878270205678. 2

878270205679. 3

878270205680. 4

Question Number : 11 Question Id : 87827052274 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Hallikar is a breed of _____

1. Cattle
2. Goat
3. Sheep
4. Pig

Options :

878270205681. 1

878270205682. 2

878270205683. 3

878270205684. 4

Question Number : 12 Question Id : 87827052275 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List-I with List-II

List-I	List-II
(Species)	(Lipid content)
(A). Buffalo	(I). 6.0
(B). Cow	(II). 3.9
(C). Holstein	(III). 3.5
(D). Guernsey	(IV). 4.9

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Options :

878270205685. 1
878270205686. 2
878270205687. 3
878270205688. 4

Question Number : 13 Question Id : 87827052276 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The fishy flavour defect in evaporated milk is caused by -----

1. *Lactococcus lactis* ssp. *lactis* var. *maltigenes*
2. *Candida lactis*
3. *Proteus ichthyosmuis*
4. *Aspergillus flavus*

Options :

878270205689. 1

878270205690. 2

878270205691. 3

878270205692. 4

Question Number : 14 Question Id : 87827052277 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A) : The HACCP increases food safety and quality standards

Reason (R) : HACCP organises your process to produce safe food

In light of the above statements, choose the *correct* answer from the options given below.

1. Both (A) and (R) are true and (R) is the correct explanation of (A).
2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
3. (A) is true but (R) is false.
4. (A) is false but (R) is true.

Options :

878270205693. 1

878270205694. 2

878270205695. 3

878270205696. 4

Question Number : 15 Question Id : 87827052278 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Arrange the following steps in the way they are involved in aseptic packaging.

- (A). Filling and sealing system
- (B). Sterilization of the packaging and the filling environment
- (C). Material for aseptic packaging

Choose the correct answer from the options given below:

- 1. (A), (B), (C).
- 2. (A), (C), (B).
- 3. (C), (A), (B).
- 4. (C), (B), (A).

Options :

- 878270205697. 1
- 878270205698. 2
- 878270205699. 3
- 878270205700. 4

**Question Number : 16 Question Id : 87827052279 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1**

In human milk the major factor concerned for germicidal action is

- 1. Lysozyme
- 2. Leucocytes
- 3. Compliment
- 4. Bifidus factor

Options :

- 878270205701. 1
- 878270205702. 2
- 878270205703. 3
- 878270205704. 4

Question Number : 17 Question Id : 87827052280 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

In which product symbiotic action of bacterial cultures are observed?

1. Yoghurt
2. Curd
3. Yakult
4. Acidophilus mik

Options :

878270205705. 1
878270205706. 2
878270205707. 3
878270205708. 4

Question Number : 18 Question Id : 87827052281 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

_____ is responsible for milk fever

1. Hypoglycemia
2. Hypo-calcimia
3. Viral infection
4. Hypo-Mangesmia

Options :

878270205709. 1
878270205710. 2
878270205711. 3
878270205712. 4

Question Number : 19 Question Id : 87827052282 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Pasteurization ensures

- (A). Least damage to the cream line
- (B). Complete destruction of spoilage-causing microbes
- (C). Negative phosphatase test
- (D). Complete destruction of pathogens

Choose the **correct** answer from the options given below:

1. (A), (C) and (D) only
2. (A) and (C) only.
3. (B) only
4. (A), (B) and (C) only.

Options :

- 878270205713. 1
- 878270205714. 2
- 878270205715. 3
- 878270205716. 4

Question Number : 20 Question Id : 87827052283 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The advantages of Low temperature long time (LTLT) pasteurization are;

- (A). Less initial investment
- (B). It is a slow process
- (C). Easy to clean and maintain
- (D). Large volume of milk may be processed continuously

Choose the **correct** answer from the options given below:

- 1. (A), (B) and (D) only.
- 2. (A), (B) and (C) only.
- 3. (A), (B), (C) and (D).
- 4. (A) and (C) only.

Options :

878270205717. 1

878270205718. 2

878270205719. 3

878270205720. 4

Question Number : 21 Question Id : 87827052284 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The advantages of High Temperature Short Time (HTST) pasteurization are;

- (A). Milk packaging can start as soon as pasteurization begins.
- (B). The capacity can be increased easily by increasing number of plates.
- (C). Less chance of accumulation of milk stone in the vat.
- (D). Large volume of milk may be processed continuously

Choose the *correct* answer from the options given below:

- 1. (A), (B) and (C) only
- 2. (A), (B) (C) and (D).
- 3. (A), (B) and (D) only
- 4. (B) and (D) only

Options :

- 878270205721. 1
- 878270205722. 2
- 878270205723. 3
- 878270205724. 4

Question Number : 22 Question Id : 87827052285 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A) : After pasteurization the amount of inorganic phosphate increases

Reason (R) : Phospholipids and some dissolved esters split

In light of the above statements, choose the *most appropriate* answer from the options given below .

- 1. Both (A) and (R) are correct and (R) is the correct explanation of (A).
- 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- 3. (A) is correct but (R) is not correct.
- 4. (A) is not correct but (R) is correct.

Options :

- 878270205725. 1
- 878270205726. 2
- 878270205727. 3
- 878270205728. 4

Question Number : 23 Question Id : 87827052286 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The recommended pressure range for homogenization of milk is _____

- 1. 100-120 Kg/cm²
- 2. 125-135 Kg/cm²
- 3. 140-175 Kg/cm²
- 4. 175-200 Kg/cm²

Options :

- 878270205729. 1
- 878270205730. 2
- 878270205731. 3
- 878270205732. 4

Question Number : 24 Question Id : 87827052287 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The temperature of milk should not be less than ____ for better homogenization.

1. 40 °C
2. 80 °C
3. 100 °C
4. 60 °C

Options :

878270205733. 1

878270205734. 2

878270205735. 3

878270205736. 4

Question Number : 25 Question Id : 87827052288 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The standard plate count (CFU/g) in ice-cream should not be more than _____ as per FSSAI regulations

1. 3,00,000
2. 2,50,000
3. 60,000
4. 1,00,000

Options :

878270205737. 1

878270205738. 2

878270205739. 3

878270205740. 4

Question Number : 26 Question Id : 87827052289 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Four-ply laminated pouch and vacuum packaging enhances the shelf life of khoa up to _____ at refrigeration temperature.

1. 120 days
2. 90 days
3. 60 days
4. 30 days

Options :

878270205741. 1

878270205742. 2

878270205743. 3

878270205744. 4

Question Number : 27 Question Id : 87827052290 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Soapy test flavour defect in Gulabjamun is caused by _____

1. frying at low temperature for short time.
2. frying at high temperature for long time.
3. higher amount of baking powder.
4. lower amount of baking powder.

Options :

878270205745. 1

878270205746. 2

878270205747. 3

878270205748. 4

Question Number : 28 Question Id : 87827052291 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The yield of rabri from one liter of buffalo milk (Minimum fat 6.0% and SNF 9.0%) will be _____

1. 10-20%
2. 20-30%
3. 30-40%
4. 40-45%

Options :

878270205749. 1

878270205750. 2

878270205751. 3

878270205752. 4

Question Number : 29 Question Id : 87827052292 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Acidic flavour defect in cream is caused due to _____

1. use of sour milk for cream separation
2. hydrolysis of fat by the action of lipase enzyme.
3. undesirable microbial contamination.
4. oxidation of the fat content due to exposure to strong sunlight

Options :

878270205753. 1

878270205754. 2

878270205755. 3

878270205756. 4

Question Number : 30 Question Id : 87827052293 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Cheesy/putrid flavour defect in cream and butter is caused by

1. *Peudomonas synxantha*
2. *Pseudomonas putrefaciens*
3. Coliform
4. *Pseudomonas nigrifaciens*

Options :

878270205757. 1

878270205758. 2

878270205759. 3

878270205760. 4

Question Number : 31 Question Id : 87827052294 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Alkaline flavour defect in butter is caused due to _____

1. use of sour neutralized cream.
2. over neutralization of cream
3. storage of butter at high temperature for long period.
4. use of milk from animals who consume bitter weeds.

Options :

878270205761. 1

878270205762. 2

878270205763. 3

878270205764. 4

Question Number : 32 Question Id : 87827052295 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Cheesy flavour defect in butter is caused due to _____

1. over neutralization of cream.
2. storage of butter at high temperature for long period.
3. use of milk from animals who consume bitter weeds.
4. growth of proteolytic bacteria causing casein breakdown.

Options :

878270205765. 1

878270205766. 2

878270205767. 3

878270205768. 4

Question Number : 33 Question Id : 87827052296 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The best storage temperature for ghee is between _____

1. 20-25 °C
2. 25-30 °C
3. 20-30 °C
4. 30-35 °C

Options :

878270205769. 1

878270205770. 2

878270205771. 3

878270205772. 4

Question Number : 34 Question Id : 87827052297 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List-I with List-II

List-I	List-II
(Ghee manufacturing method)	(Fat recovery %)
(A). Indigenous method	(I). 92
(B). Direct cream method	(II). 93
(C). Creamy-butter method	(III). 88-92
(D). Pre-statisfication method	(IV). 88-90

Choose the **correct** answer from the options given below:

1. (A) - (IV), (B) - (I), (C) - (III), (D) - (II)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Options :

878270205773. 1

878270205774. 2

878270205775. 3

878270205776. 4

Question Number : 35 Question Id : 87827052298 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The optimum combination (ratio) of cocci and rods shaped bacterias in yoghurt culture should be _____

1. 1:1
2. 1:2
3. 1:3
4. 1:4

Options :

878270205777. 1
878270205778. 2
878270205779. 3
878270205780. 4

Question Number : 36 Question Id : 87827052299 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which culture combination is used for Bifighurt

- (A) *Streptococcus thermophilus*
- (B) *Lactobacillus delbreuckii* ssp. *bulgaricus*
- (C) *Bifiodobacterium bifidum*
- (D) *Lactobacillus acidophilus*

Which of the follwing combination is **correct**

1. (A) and (B) only
2. (A), (B), and (D) only
3. (A), (B), and (C) only
4. (B), (C), and (D) only

Options :

878270205781. 1
878270205782. 2

878270205783. 3

878270205784. 4

Question Number : 37 Question Id : 87827052300 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Metalic flavour defect in lassi is caused due to _____

1. contamination of milk with zinc or chromium during heating.
2. contamination of milk with nickel or copper during heating.
3. contamination of milk with iron or magnesium during heating.
4. contamination of milk with iron or copper during heating.

Options :

878270205785. 1

878270205786. 2

878270205787. 3

878270205788. 4

Question Number : 38 Question Id : 87827052301 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

High acid and high alcohol kumiss should have following;

1. 1.0 % Lactic acid and 1.7-2.5% Ethanol
2. 0.8-1.0 % Lactic acid and 2.5-3.0% Ethanol
3. 0.7 % Lactic acid and 1.0-1.7% Ethanol
4. 0.6 % Lactic acid and 0.5-1.0% Ethanol

Options :

878270205789. 1

878270205790. 2

878270205791. 3

878270205792. 4

Question Number : 39 Question Id : 87827052302 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The isoelectric pH of casein is _____

1. 3.6

2. 5.6

3. 4.6

4. 6.6

Options :

878270205793. 1

878270205794. 2

878270205795. 3

878270205796. 4

Question Number : 40 Question Id : 87827052303 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Ice cream mix is homogenized at 2500 psi

- (A). to decrease the milk fat globule size.
- (B). to form a better emulsion.
- (C). to contribute a smoother creamier ice cream.
- (D). to ensure emulsifier and stabilizer are well blended and evenly distributed in the ice cream mix

Choose the **correct** answer from the options given below:

- 1. (A), (B) and (D) only.
- 2. (A), (B) and (C) only.
- 3. (A), (B), (C) and (D).
- 4. (B), (C) and (D) only.

Options :

878270205797. 1

878270205798. 2

878270205799. 3

878270205800. 4

Question Number : 41 Question Id : 87827052304 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The shelf life of ice cream at -18 to -29 °C is near about _____

- 1. 60 days
- 2. 180 days
- 3. 120 days
- 4. 90 days

Options :

878270205801. 1

878270205802. 2

878270205803. 3

878270205804. 4

Question Number : 42 Question Id : 87827052305 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Storage of paneer at higher temperature leads to _____

1. sour flavour defect.
2. stale flavour defect.
3. flat flavour defect.
4. rancid flavour defect.

Options :

878270205805. 1

878270205806. 2

878270205807. 3

878270205808. 4

Question Number : 43 Question Id : 87827052306 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Good quality of chhana can be obtained from cow milk when it is coagulated at ____ temperature.

1. 78 °C
2. 80 °C
3. 82 °C
4. 84 °C

Options :

878270205809. 1

878270205810. 2

878270205811. 3

878270205812. 4

Question Number : 44 Question Id : 87827052307 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The presence of colostrum in milk lead to _____ body and texture defect in channa.

1. pasty
2. loose
3. grainy
4. gummy mass

Options :

878270205813. 1

878270205814. 2

878270205815. 3

878270205816. 4

Question Number : 45 Question Id : 87827052308 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Presence of colostrum in milk lead to deeper _____ colour and appearance defect.

1. brown
2. red
3. violet
4. yellow

Options :

878270205817. 1

878270205818. 2

878270205819. 3

878270205820. 4

Question Number : 46 Question Id : 87827052309 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

For the production of rasogolla the cow milk is heated to _____

1. 70 to 74 °C
2. 75 to 76 °C
3. 76 to 80 °C
4. 80 to 84 °C

Options :

878270205821. 1

878270205822. 2

878270205823. 3

878270205824. 4

Question Number : 47 Question Id : 87827052310 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Caseinate is used as source of _____

1. protein
2. vitamin
3. acid
4. base

Options :

878270205825. 1

878270205826. 2

878270205827. 3

878270205828. 4

Question Number : 48 Question Id : 87827052311 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Ghee residue is a by-product of ghee manufacturing industry and _____ tonne are produced, per annum in India

1. 61,000
2. 71,000
3. 81,000
4. 91,000

Options :

878270205829. 1
878270205830. 2
878270205831. 3
878270205832. 4

Question Number : 49 Question Id : 87827052312 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following byproduct of dairy industry is used as a natural anti-oxidants for improving the shelf life of food products.

1. Caseinates
2. Casein
3. Ghee residue
4. Buttermilk

Options :

878270205833. 1

878270205834. 2

878270205835. 3

878270205836. 4

Question Number : 50 Question Id : 87827052313 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Ghee residue can be utilized in the preparation of

- (A). Chocolate
- (B). Burfi
- (C). Samosa filling
- (D). Chapatis
- (E). Shrikhand

Choose the **correct** answer from the options given below:

1. (A), (B), (D), and (E) only.
2. (A), (B) and (C) only.
3. (A), (B), (C) and (D).
4. (A), (B), (C), (D) and (E) only.

Options :

878270205837. 1

878270205838. 2

878270205839. 3

878270205840. 4

Question Number : 51 Question Id : 87827052314 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Purpose of packaging is

- (A). to protect a product from contamination of microorganisms
- (B). to protect a product from damage during transportation
- (C). to keep the product together
- (D). to protect a product from environmental changes

Choose the **correct** answer from the options given below:

1. (A), (B) and (D) only.
2. (A), (B) and (C) only.
3. (A), (B), (C) and (D).
4. (B), (C) and (D) only.

Options :

878270205841. 1

878270205842. 2

878270205843. 3

878270205844. 4

Question Number : 52 Question Id : 87827052315 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following is **NOT** required for a packaging material

- (A) Packaging material should not react with products.
- (B) It should be non-toxic and non-tainting.
- (C) Should be appealing to product presentation
- (D) Should have printing characteristics
- (E) It should be difficult to open, distribute, reseal and store.

Choose the *correct* answer from the options given below:

- 1. (B) only
- 2. (A), (B) and (C) only.
- 3. (E) only
- 4. (A), (B) (C) and (D) only.

Options :

878270205845. 1

878270205846. 2

878270205847. 3

878270205848. 4

Question Number : 53 Question Id : 87827052316 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following test is/are used to check the quality of packaging material

- (A) Bursting strength
- (B) Clot on boiling test
- (C) Puncture strength
- (D) Water vapour transmission rate
- (E) Acidity test

Choose the **correct** answer from the options given below:

1. (A), (B), (C) and (D) only.
2. (A), (C) and (D) only.
3. (A), (B), (C) and (E) only.
4. (B), (C) and (E) only.

Options :

878270205849. 1

878270205850. 2

878270205851. 3

878270205852. 4

Question Number : 54 Question Id : 87827052317 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following is **NOT** an advantage of plastics in dairy industry

1. Only food-grade plastic should be used in milk products.
2. Most of the plastic are reusable
3. Loss of moisture from dairy product is nil.
4. Low cost and ease of fabrication.

Options :

878270205853. 1

878270205854. 2

878270205855. 3

878270205856. 4

Question Number : 55 Question Id : 87827052318 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

In Modified Atmosphere Packaging _____ gases are used.

1. N_2 , CO_2 and H_2
2. N_2 , CO and O_2
3. CO, CO_2 and O_2
4. N_2 , CO_2 and O_2

Options :

878270205857. 1

878270205858. 2

878270205859. 3

878270205860. 4

Question Number : 56 Question Id : 87827052319 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Modified Atmosphere Packaging increases shelf-life by _____

1. 50-100%
2. 50-400%
3. 50-300%
4. 50-200%

Options :

878270205861. 1

878270205862. 2

878270205863. 3

878270205864. 4

Question Number : 57 Question Id : 87827052320 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The effective pH range for benzoic acid used as a chemical preservative of milk and milk products is

1. 2.5 - 4.0
2. < 5.0
3. 4.0 - 5.0
4. 2.0 - 3.0

Options :

878270205865. 1

878270205866. 2

878270205867. 3

878270205868. 4

Question Number : 58 Question Id : 87827052321 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Which of the following herbs are NOT used in the preservation of milk and milk products.

1. cinnamon, cloves and red chilli
2. Saffron, cloves and black pepper
3. ginger, cardamom and cloves
4. Saffron, cloves and green chilli

Options :

878270205869. 1

878270205870. 2

878270205871. 3

878270205872. 4

Question Number : 59 Question Id : 87827052322 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The main end product (metabolite) of homefermentative lactic acid bacterial cultures is/are _____ during milk fermentation.

1. Acetic acid
2. Lactic acid
3. Propionic acid, CO₂, and ethanol
4. Lactic acid, acetic acid, propionic acid, CO₂, and ethanol

Options :

878270205873. 1

878270205874. 2

878270205875. 3

878270205876. 4

Question Number : 60 Question Id : 87827052323 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The pH neutral, water soluble, low molecular weight substance, which is nonbacteriocin and resistant to nuclease, protease and lipolytic enzyme is _____

1. Reuterin
2. Bacteriocins
3. Nutmeg
4. Cardamom

Options :

878270205877. 1

878270205878. 2

878270205879. 3

878270205880. 4

Question Number : 61 Question Id : 87827052324 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The most important bacteriocins used as bio-preservatives include

1. nisin, pediocins, bifidin and sakacins.
2. nisin, reuterin, bifidin and sakacins.
3. nisin, pediocins, bifidin and reuterin.
4. reuterin, pediocins, bifidin and sakacins.

Options :

878270205881. 1

878270205882. 2

878270205883. 3

878270205884. 4

Question Number : 62 Question Id : 87827052325 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Lactococcus lactis ssp. *lactis* produces which the following antibacterial substance during fermentation --

1. Pediocins
2. Bifidin
3. Nisin
4. Sakacins

Options :

878270205885. 1

878270205886. 2

878270205887. 3

878270205888. 4

Question Number : 63 Question Id : 87827052326 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following is not a natural inhibitory substance found in raw milk?

1. Lactoferrin
2. Nisin
3. Immunoglobulins
4. Lysozyme

Options :

878270205889. 1

878270205890. 2

878270205891. 3

878270205892. 4

Question Number : 64 Question Id : 87827052327 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

How will you detect the presence of urea in milk?

1. When adulterated milk is treated with HCl and Resorcinol powder and boiling the mixture in water it will give red colour.
2. When adulterated milk is mixed with para dimethyl amino benzaldehyde, it will become deep yellow coloured.
3. When adulterated milk is treated with para phenylenediamine hydrochloric acid, it will give dark blue colour.
4. When adulterated milk is treated with ferric chloride solution and with concentrated sulphuric acid violet colour at the junction of two layers will develop.

Options :

878270205893. 1

878270205894. 2

878270205895. 3

878270205896. 4

Question Number : 65 Question Id : 87827052328 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The following reaction is used for the detection of _____ adulteration in milk sample.

Milk sample + AgNO_3 + drop of $\text{K}_2\text{Cr}_2\text{O}_7 \longrightarrow$ Yellow coloration

1. sodium carbonate
2. urea
3. sugar
4. hydrogen peroxide

Options :

878270205897. 1

878270205898. 2

878270205899. 3

878270205900. 4

Question Number : 66 Question Id : 87827052329 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The following reaction is used for the detection of _____ adulteration in milk sample.



1. urea
2. sugar
3. formaldehyde
4. water

Options :

878270205901. 1
878270205902. 2
878270205903. 3
878270205904. 4

Question Number : 67 Question Id : 87827052330 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

At birth calves will normally have _____ temporary incisors ready to appear through the gums of the jaw.

1. two
2. four
3. eight
4. twelve

Options :

878270205905. 1

878270205906. 2

878270205907. 3

878270205908. 4

Question Number : 68 Question Id : 87827052331 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match **List-I** with **List-II**

List-I	List-II
(Name of the breeds)	(Origin State of the breed)
(A). Sahiwal	(I). Madhya pradesh
(B). Tharparkar	(II). Maharashtra
(C). Nimari	(III). Punjab
(D). Dangi	(IV). Hydrabad

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Options :

878270205909. 1

878270205910. 2

878270205911. 3

878270205912. 4

Question Number : 69 Question Id : 87827052332 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Arrange the following breeds of buffaloes according to decreasing order of their lactation yield

(A). Jaffarbadi

(B). Mehsana

(C). Bhadawari

Choose the **correct** answer from the options given below:

1. (A), (B), (C)
2. (B), (A), (C)
3. (C), (A), (B)
4. (C), (B), (A).

Options :

878270205913. 1

878270205914. 2

878270205915. 3

878270205916. 4

Question Number : 70 Question Id : 87827052333 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Buffalo population in India is _____

1. 120 millions
2. 85 millions
3. 140 millions
4. 150 millions

Options :

878270205917. 1

878270205918. 2

878270205919. 3

878270205920. 4

Question Number : 71 Question Id : 87827052334 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Native state of Surati buffalo breed is _____

1. Bihar
2. Maharashtra
3. Uttar pradesh
4. Gujarat

Options :

878270205921. 1

878270205922. 2

878270205923. 3

878270205924. 4

Question Number : 72 Question Id : 87827052335 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Dual purpose breed of cow is _____

1. Sindhi
2. Mehsana
3. Sahiwal
4. Tharparkar

Options :

878270205925. 1

878270205926. 2

878270205927. 3

878270205928. 4

Question Number : 73 Question Id : 87827052336 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following element is **NOT** present in milk

1. K
2. Fe
3. Mg
4. Ca

Options :

878270205929. 1

878270205930. 2

878270205931. 3

878270205932. 4

Question Number : 74 Question Id : 87827052337 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Better quality channa is prepared from

1. Cow milk
2. Buffalo milk
3. Sheep milk
4. Camel milk

Options :

878270205933. 1

878270205934. 2

878270205935. 3

878270205936. 4

Question Number : 75 Question Id : 87827052338 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : Scientific Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match **List-I** with **List-II**

List-I	List-II
(Name of the Bacteria)	(Shape of their cell)
(A). Coccus	(I). Spherical
(B). Bacillus	(II). Rod-shaped
(C). Vibrio	(III). Curved rods
(D). Spirillum	(IV). Coiled threads

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Options :

878270205937. 1

878270205938. 2

878270205939. 3

878270205940. 4