National Testing Agency

Question Paper Name :	Dairy Engineering 23rd Sep 2020 Shift 2 Set 2
Subject Name :	Dairy Engineering
Creation Date :	2020-09-23 19:33:41
Duration :	120
Total Marks :	480
Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes

Dairy Engineering

Group Number :	1
Group Id :	71087041
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	480
Is this Group for Examiner? :	No

Part A General Knowledge

Section Id :	710870121
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20

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Number of Questions to be attempted :	20
Section Marks :	80
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870121
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 7108704861 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which one of the following crops is a commercial crop in Punjab and Haryana but is a subsistence crop in Orissa?

1. Tea
2. Cotton
3. Rubber
4. Rice

Options :
71087019441. 1
71087019442. 2
71087019443. 3
71087019444. 4

Question Number : 2 Question Id : 7108704862 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

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Which of the following are the two most important wheat-growing zones of the country?

A. Ganga-Satluj plains in the north-west

B. Deltaic regions

C. Black soil region of the Deccan

D. Plains of north-east

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

1. Only A and B
2. Only B and C
3. Only C and D
4. Only A and C

Options :

71087019445. 1
71087019446. 2
71087019447. 3
71087019448. 4

Question Number : 3 Question Id : 7108704863 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Indian agriculture is typically characterized as

1. Land surplus, labour scarce economy
2. Land surplus, labour surplus economy
3. Land scarce, labour surplus economy
4. Land scarce, labour scarce economy

Options :

71087019449. 1

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71087019450. 2
71087019451. 3
71087019452. 4

Question Number : 4 Question Id : 7108704864 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following countries is the main rival of India in tea export?

1. China
2. Japan
3. Germany
4. Sri Lanka

Options :

71087019453. 1
71087019454. 2
71087019455. 3
71087019456. 4

Question Number : 5 Question Id : 7108704865 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements

Statement A: MSP is declared by the government every year to provide incentives to the farmers for raising the production of crops.

Statement B: Buffer stock is created to distribute food grains in the deficit areas and among the poorer strata of the society at the lower price than the market price.

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

1. Both Statement A and Statement B are correct
2. Both Statement A and Statement B are incorrect
3. Statement A is correct but Statement B is incorrect
4. Statement A is incorrect but Statement B is correct

Options :

71087019457. 1
71087019458. 2
71087019459. 3
71087019460. 4

Question Number : 6 Question Id : 7108704866 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which one of the following is a global association of nations of the world to help cooperation in international law, security, economic development and social equity?

1. United Nations Organization
2. International Monetary Fund
3. World Bank
4. World Health Organization

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Options :

71087019461. 1

71087019462. 2

71087019463. 3

71087019464. 4

Question Number : 7 Question Id : 7108704867 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under the Ganga Action Plan Phase II, pollution abatement works are being taken up in how many towns?

1. 57
2. 65
3. 52
4. 69

Options :

71087019465. 1

71087019466. 2

71087019467. 3

71087019468. 4

Question Number : 8 Question Id : 7108704868 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following statements is **incorrect**?

1. The highest number of pigs in the world are found in India
2. Utter Pradesh provides largest amount of pork
3. Assam has the largest number of pork producing pigs
4. Pork constitutes about 7.6% of the total meat produced in India

Options :

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71087019469. 1
71087019470. 2
71087019471. 3
71087019472. 4

Question Number : 9 Question Id : 7108704869 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which type of N-fertilizer is suitable for water-logged soils?

1. Zinc Phosphate
2. Ammonium Sulphate
3. Calcium
4. Potassium Nitrate

Options :
71087019473. 1
71087019474. 2
71087019475. 3
71087019476. 4

Question Number : 10 Question Id : 7108704870 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

The famous Bailadila range of hills in the Bastar district of Chhattisgarh is famous for its

1. Bauxite deposits
2. Manganese deposits
3. Copper deposits
4. High-grade haematite deposits

Options :
71087019477. 1

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71087019478. 2
71087019479. 3
71087019480. 4

Question Number : 11 Question Id : 7108704871 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

A farmer wishes to start a 100 sq. m rectangular vegetable garden. Since he has only 30m barbed wire, he fences three sides of the garden letting his house compound wall act as the fourth side fencing. What is the dimension of the garden?

1. 15 m x 6.67m
2. 20 m x 5 m
3. 30 m x 3.33 m
4. 40 m x 2.5 m

Options :
71087019481. 1
71087019482. 2
71087019483. 3
71087019484. 4

Question Number : 12 Question Id : 7108704872 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

In which one of the following industries, the consumption of natural rubber is the largest?

1. Auto tyres and tubes
2. Footwear
3. Dipped goods
4. Latex foam

Options :

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71087019485. 1
71087019486. 2
71087019487. 3
71087019488. 4

Question Number : 13 Question Id : 7108704873 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which one of the following countries was the partner country of 34th Surajkund International Crafts Fair held in Haryana?

1. China
2. Nepal
3. Bhutan
4. Uzbekistan

Options :
71087019489. 1
71087019490. 2
71087019491. 3
71087019492. 4

Question Number : 14 Question Id : 7108704874 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Nobel laureate Abhijit Vinayak Banerjee was conferred the honorary Doctor of Letters (D. Litt.) by which University?

1. University of Delhi
2. University of Kolkata
3. University of Mumbai
4. University of Hyderabad

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Options :

71087019493. 1

71087019494. 2

71087019495. 3

71087019496. 4

Question Number : 15 Question Id : 7108704875 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Where is the headquarters of European Union?

1. Geneva, Switzerland
2. Washington D.C., USA
3. New York, US
4. Brussels, Belgium

Options :

71087019497. 1

71087019498. 2

71087019499. 3

71087019500. 4

Question Number : 16 Question Id : 7108704876 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following would be deficient if one finds high somatic cell count in the cow's milk?

1. Butterfat
2. Whey protein
3. Casein
4. Trace minerals

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Options :

71087019501. 1
71087019502. 2
71087019503. 3
71087019504. 4

Question Number : 17 Question Id : 7108704877 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Who was the first administrator-statesman to attempt planning as a means for economic development?

1. C. Rajagopalachari
2. V. T. Krishnamachari
3. M. Viswesvarayya
4. Sir C. P. Ramaswami Aiyyar

Options :

71087019505. 1
71087019506. 2
71087019507. 3
71087019508. 4

Question Number : 18 Question Id : 7108704878 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Amazon rainforest span over nine countries. In August 2019, in which country did a deadly fire broke out in the Amazon forest?

1. Brazil
2. Venezuela
3. Colombia
4. Argentina

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Options :

71087019509. 1

71087019510. 2

71087019511. 3

71087019512. 4

Question Number : 19 Question Id : 7108704879 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Economic liberalization in India started with

1. Sustainable changes in industrial licensing policy
2. The convertibility of the Indian Rupee
3. Significant reduction of tax rates
4. Changes in procedural formalities for FDI

Options :

71087019513. 1

71087019514. 2

71087019515. 3

71087019516. 4

Question Number : 20 Question Id : 7108704880 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The term 'Delimitation' which was in news recently is associated with which process?

1. Fixing the limit of Income tax
2. Fixing limits of Affordable housing
3. Fixing limits of Territorial constituencies
4. Fixing limits of Chairpersons salary

Options :

71087019517. 1

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71087019518. 2
71087019519. 3
71087019520. 4

Part B Core Dairy Science Dairy Technology and Food Technology

Section Id :	710870122
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870122
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 7108704881 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The most variable constituent in milk is

1. Chloride
2. Protein
3. Lactose
4. Fat

Options :

71087019521. 1
71087019522. 2

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71087019523. 3
71087019524. 4

Question Number : 22 Question Id : 7108704882 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A1 and A2 types of milk refer to which one of the following casein fractions?

1. αs1- casein
2. αs2- casein
3. κ-casein
4. β-casein

Options :

71087019525. 1
71087019526. 2
71087019527. 3
71087019528. 4

Question Number : 23 Question Id : 7108704883 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Milk serum is free from which of the following constituents?

A. Fat
B. Caseins
C. Whey proteins
D. Lactose

Choose the correct answer from the options given below:

1. A and B only
2. C and D only
3. B and C only
4. A and D only

Options :

71087019529. 1
71087019530. 2
71087019531. 3
71087019532. 4

Question Number : 24 Question Id : 7108704884 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following unsaturated fatty acids is present at the highest level in milk fat?

1. Linoleic acid
2. Linolenic acid
3. Oleic acid
4. Arachidonic acid

Options :

71087019533. 1
71087019534. 2
71087019535. 3
71087019536. 4

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Question Number : 25 Question Id : 7108704885 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The molecular formula of cholesterol is :

1. $C_{27}H_{45}OH$
2. $C_{30}H_{50}OH$
3. $C_{28}H_{56}OH$
4. $C_{27}H_{48}OH$

Options :

71087019537. 1

71087019538. 2

71087019539. 3

71087019540. 4

Question Number : 26 Question Id : 7108704886 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following forms of lactose is/are mainly present in dried milk?

A. α-lactose hydrate
B. β-lactose anhydride
C. Lactose glass
D. β-lactose hydrate

Choose the correct answer from the options given below:

1. A only
2. B only
3. C only
4. A and D both

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Options :

71087019541. 1

71087019542. 2

71087019543. 3

71087019544. 4

Question Number : 27 Question Id : 7108704887 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Rennet acts at 105-106 peptide bond of κ-casein. What are the amino acids at these positions?

1. Methionine & Phenylalanine
2. Alanine & Methionine
3. Phenylalanine & Methionine
4. Methionine & Glycine

Options :

71087019545. 1

71087019546. 2

71087019547. 3

71087019548. 4

Question Number : 28 Question Id : 7108704888 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following changes occur in cheddar cheese during ripening?

A. Proteolysis
B. Lipolysis
C. Fermentation

Choose the correct answer from the options given below:

1. A only
2. B only
3. C only
4. A, B and C

Options :

71087019549. 1
71087019550. 2
71087019551. 3
71087019552. 4

Question Number : 29 Question Id : 7108704889 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What is the role of stabilizers in ice-cream?

1. Reduction of size of ice crystals
2. Reduction of size of lactose crystals
3. Increase overrun
4. Improve flavour

Options :

71087019553. 1
71087019554. 2
71087019555. 3
71087019556. 4

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Question Number : 30 Question Id : 7108704890 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

ISO means

1. International Standards Organization
2. Indian Standards Organization
3. International Organizations for Standardization
4. International Specifications Organisation

Options :

71087019557. 1
71087019558. 2
71087019559. 3
71087019560. 4

Question Number : 31 Question Id : 7108704891 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is an agent, which is present in gram-positive bacteria and is also called pyrogenic?

1. Lipid-A
2. Teichoic acid
3. Peptidoglycan
4. Integrated membrane protein

Options :

71087019561. 1
71087019562. 2
71087019563. 3
71087019564. 4

Question Number : 32 Question Id : 7108704892 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

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Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

The common activity test for starter cultures are:

A. Horrell-Elliker test
B. Creatine test
C. Rennet coagulation time test
D. Resazurin reduction time test
E. Titratable acidity

Choose the correct answer from the options given below:

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

Options :
71087019565. 1
71087019566. 2
71087019567. 3
71087019568. 4

Question Number : 33 Question Id : 7108704893 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Type strain is used for referring to

1. Species
2. Genus
3. Family
4. Division

Options :
71087019569. 1

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71087019570. 2
71087019571. 3
71087019572. 4

Question Number : 34 Question Id : 7108704894 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The term 'very little animalcules' was coined by

1. Louis Pasteur
2. Robert Hooke
3. Anton van Leeuwenhoek
4. Robert Koch

Options :

71087019573. 1
71087019574. 2
71087019575. 3
71087019576. 4

Question Number : 35 Question Id : 7108704895 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Transforming principle was given by

1. Watson and Crick
2. Holley, Nirenberg and Khorana
3. F. Griffith
4. Hershey and Chase

Options :

71087019577. 1
71087019578. 2
71087019579. 3

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71087019580. 4

Question Number : 36 Question Id : 7108704896 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Bacterial inactivation by Pulse Electric Field (PEF) technology is due to

1. Pore formation in cell membrane
2. DNA damage
3. Protein denaturation
4. Cellular oxidation

Options :

71087019581. 1

71087019582. 2

71087019583. 3

71087019584. 4

Question Number : 37 Question Id : 7108704897 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is a lantibiotic bacteriocin?

1. Pediocin
2. Helveticus
3. Gassericin
4. Nisin

Options :

71087019585. 1

71087019586. 2

71087019587. 3

71087019588. 4

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Question Number : 38 Question Id : 7108704898 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The outermost layer in certain bacterial cell, also known as 'K', is

1. Flagella
2. Capsule
3. Cell wall
4. Pili

Options :

71087019589. 1

71087019590. 2

71087019591. 3

71087019592. 4

Question Number : 39 Question Id : 7108704899 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is the causative agent for Q Fever?

1. *Salmonella*
2. *E. coli*
3. *Listeria*
4. *Coxiella burnetii*

Options :

71087019593. 1

71087019594. 2

71087019595. 3

71087019596. 4

Question Number : 40 Question Id : 7108704900 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which one of the following is a systematic approach to the identification, evaluation and control of food safety hazards?

1. Microbial analysis
2. FSSAI
3. HACCP
4. PFA

Options :

71087019597. 1
71087019598. 2
71087019599. 3
71087019600. 4

Question Number : 41 Question Id : 7108704901 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What will be the yield of butter (80% fat) from 850 kg cream having 40% fat, assuming the fat losses to be 0.6% of total fat?

1. 425 kg
2. 270.5 kg
3. 422.5 kg
4. 272 kg

Options :

71087019601. 1
71087019602. 2
71087019603. 3
71087019604. 4

Question Number : 42 Question Id : 7108704902 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements

Statement I: Ageing time of ice cream containing sodium alginate is about 3 hours

Statement II: Ageing time of ice cream containing gelatin is about 10 hours

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

1. Both Statement I and Statement II are correct
2. Both Statement I and Statement II are incorrect
3. Statement I is correct and Statement II is incorrect
4. Statement I is incorrect and Statement II is correct

Options :

71087019605. 1
71087019606. 2
71087019607. 3
71087019608. 4

Question Number : 43 Question Id : 7108704903 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements

Statement I: Ghee prepared using ripened cream has an intense nutty flavour

Statement II: Ghee prepared using pre-stratified butter has an intense nutty flavour

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

1. Both Statement I and Statement II are correct
2. Both Statement I and Statement II are incorrect
3. Statement I is correct and Statement II is incorrect
4. Statement I is incorrect and Statement II is correct

Options :

71087019609. 1
71087019610. 2
71087019611. 3
71087019612. 4

Question Number : 44 Question Id : 7108704904 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements

Statement I: High-fat content and higher homogenizing pressure alter the surface layer of fat globules. The consequence is - heat stability decreases

Statement II: High-fat content and higher homogenizing pressure alter the surface layer of fat globules. The consequence is – rheological properties of fermented milk products are different from those of unhomogenized milk

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

1. Both Statement I and Statement II are correct
2. Both Statement I and Statement II are incorrect
3. Statement I is correct and Statement II is incorrect
4. Statement I is incorrect and Statement II is correct

Options :

71087019613. 1
71087019614. 2
71087019615. 3
71087019616. 4

Question Number : 45 Question Id : 7108704905 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The process to increase volume by whipping air into the ice cream mix is called

1. Homogenization
2. Ageing
3. Over run
4. Hardening

Options :

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71087019617. 1
71087019618. 2
71087019619. 3
71087019620. 4

Question Number : 46 Question Id : 7108704906 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The marker enzyme for cream pasteurization is

1. Plasmin
2. Phosphatase
3. Catalase
4. Peroxidase

Options :

71087019621. 1
71087019622. 2
71087019623. 3
71087019624. 4

Question Number : 47 Question Id : 7108704907 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The second stage of homogenization is done to

1. Reduce the fat globule size to <2 mm
2. Disintegrate the agglomerates of fat globules
3. Remove whey
4. Increase the temperature of milk

Options :

71087019625. 1
71087019626. 2

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71087019627. 3
71087019628. 4

Question Number : 48 Question Id : 7108704908 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Milk powders are classified into low-, medium- and high- heat treated powders, on the basis of

1. Extent of insolubility
2. Reconstitutability
3. Whey protein nitrogen index
4. Feathering index

Options :

71087019629. 1
71087019630. 2
71087019631. 3
71087019632. 4

Question Number : 49 Question Id : 7108704909 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following statements is true with respect to the major causes of deterioration of whole milk powder?

1. Oxidation of fat, Maillard browning and lactose crystallization
2. Bacterial growth, hydrolysis of fat and developed acidity
3. Caramelization, carbon dioxide production and lactic acid production
4. Denaturation of proteins, conversion of lactose crystals to amorphous form and fat crystallization

Options :

71087019633. 1

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71087019634. 2
71087019635. 3
71087019636. 4

Question Number : 50 Question Id : 7108704910 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following statements is NOT true with respect to the physico-chemical changes occurring in khoa during preparation?

1. Colour change, homogenization of milk fat and heat coagulation of proteins
2. Free fat formation, super saturation of lactose and partial precipitation of milk salts
3. Reduction in moisture content, increase in solid contents and increase in acidity
4. Increase in bacterial count, increase in pH and decrease in acidity

Options :

71087019637. 1
71087019638. 2
71087019639. 3
71087019640. 4

Question Number : 51 Question Id : 7108704911 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Match List I with List II

List I	List II
A. Elastic	I. Water
B. Viscous	II. Dough
C. Plastic	III. Steel
D. Generalized Maxwell body	IV. Butter

Choose the correct answer from the options given below:

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

Options :

71087019641. 1

71087019642. 2

71087019643. 3

71087019644. 4

Question Number : 52 Question Id : 7108704912 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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The advantages of falling film evaporators are

A. Less residence time
B. More overall heat transfer coefficient
C. Less fouling problem
D. Low vacuum is possible

Choose the correct answer from the options given below

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

Options :

71087019645. 1
71087019646. 2
71087019647. 3
71087019648. 4

Question Number : 53 Question Id : 7108704913 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following statement is NOT correct?

1. Mechanical vibrators enhance efficiency of FBD
2. Doctors blades are used in FBD
3. Mechanical sweepers are used in spray dryers
4. Space between the rollers determines thickness of feed layer

Options :

71087019649. 1
71087019650. 2
71087019651. 3
71087019652. 4

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Question Number : 54 Question Id : 7108704914 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Instruments that measure the process variables and put out a corresponding proportional signal are

1. Controllers
2. Transmitters
3. Conveyors
4. Regulators

Options :

71087019653. 1
71087019654. 2
71087019655. 3
71087019656. 4

Question Number : 55 Question Id : 7108704915 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following has least value of thermal conductivity?

1. Air
2. Water
3. Copper
4. Glass

Options :

71087019657. 1
71087019658. 2
71087019659. 3
71087019660. 4

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Question Number : 56 Question Id : 7108704916 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A vacuum pump that does NOT use moving parts is

1. Steam trap
2. Condenser
3. Jet ejector
4. Nozzle

Options :

71087019661. 1

71087019662. 2

71087019663. 3

71087019664. 4

Question Number : 57 Question Id : 7108704917 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

What is the approximate capacity of a domestic window type air conditioner?

1. 0.1 TR
2. 1.0 TR
3. 100 TR
4. 10 TR

Options :

71087019665. 1

71087019666. 2

71087019667. 3

71087019668. 4

Question Number : 58 Question Id : 7108704918 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Absolute pressure means fluid pressure at

A. Absolute zero

B. Perfect vacuum

C. Gauge pressure

D. Atmospheric pressure

Choose the correct answer from the options given below:

1. A only
2. A and B only
3. C only
4. D only

Options :

71087019669. 1
71087019670. 2
71087019671. 3
71087019672. 4

Question Number : 59 Question Id : 7108704919 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Torr is a unit of measurement of

1. Vacuum
2. Positive pressure
3. Humidity
4. Centrifugal force

Options :

71087019673. 1

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71087019674. 2
71087019675. 3
71087019676. 4

Question Number : 60 Question Id : 7108704920 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Controller is a device that continuously compares the measured value with

1. Reference value
2. Corrected signal
3. Differential value
4. Absolute value

Options :

71087019677. 1
71087019678. 2
71087019679. 3
71087019680. 4

Question Number : 61 Question Id : 7108704921 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following anti-nutritional factors suppresses the function of the thyroid gland?

1. Goitrogens
2. Saponins
3. Protease –inhibitors
4. Cyanogenic glycosides

Options :

71087019681. 1
71087019682. 2

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71087019683. 3
71087019684. 4

Question Number : 62 Question Id : 7108704922 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The flavour of clove used in food is due to

1. Lycopene
2. Capsacin
3. Eugenol
4. Garcinol

Options :

71087019685. 1
71087019686. 2
71087019687. 3
71087019688. 4

Question Number : 63 Question Id : 7108704923 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following combinations of enzymes could be used in enzyme-based oxygen scavengers of packed foods?

1. Glucose oxidase and Catalase
2. Glucose isomerase and Polyphenol oxidase
3. Catalase and Peroxidase
4. Pectin methyl esterase and Glucose isomerase

Options :

71087019689. 1
71087019690. 2
71087019691. 3

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71087019692. 4

Question Number : 64 Question Id : 7108704924 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is NOT correct in reference to thermally processed foods?

1. *Clostridium botulinum* spores do not germinate below pH 4.6
2. 12-D concept refers to the process lethality requirement in case of canned foods
3. Flat sour defect in canned food is caused by *Bacillus polymyxa*
4. Microbial inactivation during thermal processing usually follows a logarithmic order

Options :

71087019693. 1

71087019694. 2

71087019695. 3

71087019696. 4

Question Number : 65 Question Id : 7108704925 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hydrogenation of vegetable oil is used for two purposes:

1. To improve colour, flavor and to reduce melting point
2. To improve oxidative stability and convert liquid oil to plastic /hard fats
3. To remove waxes and saturated triglycerides
4. Neutralization and deodorization of oil

Options :

71087019697. 1

71087019698. 2

71087019699. 3

71087019700. 4

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Question Number : 66 Question Id : 7108704926 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Adulteration of ghee with vanaspati can be detected by

1. Beiber test
2. Becchi test
3. Baudouin test
4. Halphen test

Options :

71087019701. 1

71087019702. 2

71087019703. 3

71087019704. 4

Question Number : 67 Question Id : 7108704927 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Microbial rennet is NOT produced by

1. *Endothia parasitica*
2. *Mucor miehei*
3. *Aspergillus niger*
4. *Bacillus polymyxa*

Options :

71087019705. 1

71087019706. 2

71087019707. 3

71087019708. 4

Question Number : 68 Question Id : 7108704928 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following is the correct sequence of operation during canning of food products?

A. Syruping or Brining
B. Double seaming
C. Exhausting
D. Thermal processing
E. Clinching

Choose the correct answer from the options given below:

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

Options :

71087019709. 1
71087019710. 2
71087019711. 3
71087019712. 4

Question Number : 69 Question Id : 7108704929 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following leavening agents is essentially used for producing crackers (salt biscuits)?

A. Sodium bicarbonate
B. Sodium carbonate
C. Yeast
D. Ammonium bicarbonate

Choose the correct answer from the options given below:

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

Options :

71087019713. 1
71087019714. 2
71087019715. 3
71087019716. 4

Question Number : 70 Question Id : 7108704930 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is MOST suitable hydrocolloid for reduced oil absorption in fried food?

1. Hydroxy propoxy methyl cellulose
2. Carboxy methyl Cellulose
3. Starch
4. Microcrystalline cellulose

Options :

71087019717. 1
71087019718. 2
71087019719. 3

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71087019720. 4

Part C Dairy Engineering

Section Id :	710870123
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870123
Question Shuffling Allowed :	Yes

Question Number : 71 Question Id : 7108704931 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following is NOT viscoelastic in nature?

A. Steel

B. Water

C. Eucalyptus honey

Choose the ***most appropriate*** answer from the options given below

1. A only
2. B only
3. C only
4. A and B both

Options :

71087019721. 1
71087019722. 2
71087019723. 3
71087019724. 4

Question Number : 72 Question Id : 7108704932 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Permeate flux (J) is given by

1. Permeate volume divided by membrane area and time
2. Membrane area divided by time and multiplied by Permeate volume
3. Permeate volume divided by time
4. Permeate volume divided by membrane area, time and average molecular weight

Options :

71087019725. 1
71087019726. 2
71087019727. 3

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71087019728. 4

Question Number : 73 Question Id : 7108704933 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Calculate the rate of heat energy emitted by $100m^2$ of a polished iron surface (emissivity=0.06). The temperature of the surface is 37^0C

1. 2940 W
2. 3040 W
3. 3141 W
4. 3245 W

Options :

71087019729. 1

71087019730. 2

71087019731. 3

71087019732. 4

Question Number : 74 Question Id : 7108704934 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is a surface phenomenon?

1. Adsorption
2. Desorption
3. Microwave heating
4. Convective heating

Options :

71087019733. 1

71087019734. 2

71087019735. 3

71087019736. 4

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Question Number : 75 Question Id : 7108704935 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is time dependent?

1. Newtonian
2. Pseudoplastic
3. Viscoplastic
4. Thixotropic

Options :

71087019737. 1
71087019738. 2
71087019739. 3
71087019740. 4

Question Number : 76 Question Id : 7108704936 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Per-evaporation is a process in which separation occurs by

1. Elevated pressure at feed side
2. Elevated pressure at permeate side
3. Osmotic pressure difference
4. Phase change of permeate

Options :

71087019741. 1
71087019742. 2
71087019743. 3
71087019744. 4

Question Number : 77 Question Id : 7108704937 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

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Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which one of the following parts of a microwave oven generates microwaves?

1. Wave guide and transmitter
2. Modulator
3. Magnetron
4. Electron tube

Options :
71087019745. 1
71087019746. 2
71087019747. 3
71087019748. 4

Question Number : 78 Question Id : 7108704938 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which one of the following laws states that the molar flux of solute is proportional to the concentration gradient?

1. Fourier's law
2. Dalton's law
3. Fick's law
4. Raoult's law

Options :
71087019749. 1
71087019750. 2
71087019751. 3
71087019752. 4

Question Number : 79 Question Id : 7108704939 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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Correct Marks : 4 Wrong Marks : 1

Which one of the following statements is FALSE?

1. SSHE has relatively poor energy efficiency as compared to plate & tubular heat exchanger
2. SSHE is suitable for high viscous products
3. SSHE is suitable for khoa manufacture
4. SSHE is suitable for milk pasteurization

Options :

71087019753. 1
71087019754. 2
71087019755. 3
71087019756. 4

Question Number : 80 Question Id : 7108704940 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following is used for cold storage insulation?

A. Glass wool

B. Foam glass

C. Paper board

Choose the ***most appropriate*** answer from the options given below

1. A only
2. B only
3. C only
4. A and B both

Options :

71087019757. 1
71087019758. 2

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71087019759. 3
71087019760. 4

Question Number : 81 Question Id : 7108704941 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Identify the type(s) of thermometer employing the principle of solid expansion in the form of a cantilever beam

A. Bimetallic thermometer

B. Mercury thermometer

C. Invar

D. Solid rod

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

1. Only A is correct
2. Only A and C are correct
3. Only B is correct
4. Only B and C are correct

Options :
71087019761. 1
71087019762. 2
71087019763. 3
71087019764. 4

Question Number : 82 Question Id : 7108704942 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

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Which one of the following forms the basis of prediction of freezing time?

1. BET model
2. Plank model
3. Henry model
4. Casson model

Options :

71087019765. 1
71087019766. 2
71087019767. 3
71087019768. 4

Question Number : 83 Question Id : 7108704943 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Foam spray dried milk powder has a bulk density similar to that of

1. Spray dried powder
2. Roller dried powder
3. Instantised powder
4. Tray dried powder

Options :

71087019769. 1
71087019770. 2
71087019771. 3
71087019772. 4

Question Number : 84 Question Id : 7108704944 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Sorption hysteresis means

1. Adsorption and desorption isotherm follow different path
2. Adsorption and desorption isotherm follow same path
3. Adsorption isotherm lies above desorption isotherm
4. Absence of any specific pattern of adsorption isotherm and desorption isotherm

Options :

71087019773. 1
71087019774. 2
71087019775. 3
71087019776. 4

Question Number : 85 Question Id : 7108704945 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Identify the law which means that the net quantity of heat transferred in a process is equal to the net quantity of work done (that is energy is conserved)

1. Zeroth law of thermodynamics
2. First law of thermodynamics
3. Second law of thermodynamics
4. Henry's law

Options :

71087019777. 1
71087019778. 2
71087019779. 3
71087019780. 4

Question Number : 86 Question Id : 7108704946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Homogenisation valve in high pressure homogeniser is made of

1. Stainless steel
2. Tungsten
3. Iron alloy
4. Stellite

Options :

71087019781. 1
71087019782. 2
71087019783. 3
71087019784. 4

Question Number : 87 Question Id : 7108704947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The ratio between heat absorbed by the refrigerant as it flows through the evaporator to the heat equivalence of the energy supplied to the compressor is

1. COP (coefficient of performance)
2. COR (coefficient of refrigeration)
3. Coefficient of cooling
4. Heat capacity of refrigerant

Options :

71087019785. 1
71087019786. 2
71087019787. 3
71087019788. 4

Question Number : 88 Question Id : 7108704948 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Ultrasound sensors can be used in knowing

1. Solid level in silos
2. Shearing action during liquid flow
3. Liquid level in silos
4. Shearing action during homogenisation

Options :

71087019789. 1
71087019790. 2
71087019791. 3
71087019792. 4

Question Number : 89 Question Id : 7108704949 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Basic requirements of the transducer are

A Ruggedness

B Non-linearity

C Hysteresis

D Repeatability

E Good dynamics response

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

1. Only A and B are correct
2. Only A, C and D are correct
3. Only A, D and E is correct
4. Only A, B and C are correct

Options :

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71087019793. 1
71087019794. 2
71087019795. 3
71087019796. 4

Question Number : 90 Question Id : 7108704950 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

During the refrigeration process, the compressor in the vapour recompression system becomes hotter because of

1. Not enough refrigerant
2. Oversized compressor
3. Too much refrigerant
4. Absence of air in cycle

Options :
71087019797. 1
71087019798. 2
71087019799. 3
71087019800. 4

Question Number : 91 Question Id : 7108704951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

In a single effect evaporator (vacuum pan), steam consumption for evaporation is

1. 1.0 – 1.2 kg/kg water
2. 2.0 – 2.2 kg/kg water
3. 3.0 – 3.2 kg/kg water
4. 4.0 – 4.2 kg/kg water

Options :
71087019801. 1

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71087019802. 2
71087019803. 3
71087019804. 4

Question Number : 92 Question Id : 7108704952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Effectiveness of heat transfer is given by

1. Actual heat transfer divided by maximum possible heat transfer
2. Temperature of product divided by temperature of heating medium
3. Temperature of product divided by difference of initial temperature of heating medium and final temperature of heating medium
4. Maximum heat transfer divided by actual heat transfer and multiplies by 100

Options :

71087019805. 1
71087019806. 2
71087019807. 3
71087019808. 4

Question Number : 93 Question Id : 7108704953 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following are intermediate moisture foods?

A Partially dried fruit with humectant

B Sweetened condensed milk

C Nuts

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

1. Only A is correct
2. Only A and C are correct
3. Only A, B and C is correct
4. Only A and B are correct

Options :

71087019809. 1
71087019810. 2
71087019811. 3
71087019812. 4

Question Number : 94 Question Id : 7108704954 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Typical air velocity in the fluidized dryer would be how many times the maximum fluidisation velocity?

1. 5 – 6 times
2. 9 – 10 times
3. 2 – 3 times
4. Same as fluidisation velocity

Options :

71087019813. 1
71087019814. 2

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71087019815. 3
71087019816. 4

Question Number : 95 Question Id : 7108704955 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The expression for freezing time of infinite shapes is

1. $\frac{L\rho}{Tf-Ta}\left[\frac{a2}{2h}+\frac{a3}{8Kf}\right]$
2. $\frac{L\rho}{Tf-Ta}\left[\frac{a2}{2h}-\frac{a3}{8Kf}\right.$
3. $\frac{L\rho}{Tf-Ta}\left[\frac{a}{2h}+\frac{a2}{8Kf}\right]$
4. $\frac{L\rho}{Tf-Ta}\left[\frac{a2}{4h}+\frac{a3}{16Kf}\right]$

Options :

71087019817. 1
71087019818. 2
71087019819. 3
71087019820. 4

Question Number : 96 Question Id : 7108704956 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The activity in which increasing the amplitude of the signal DOES NOT affect its waveform is called

1. Amplification
2. Attenuation
3. Data presentation
4. Signal filtration

Options :

71087019821. 1

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71087019822. 2
71087019823. 3
71087019824. 4

Question Number : 97 Question Id : 7108704957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In the dairy industry, chilled water supply is maintained by

1. Cold stores
2. BMC
3. IBT
4. Storage tanks

Options :

71087019825. 1
71087019826. 2
71087019827. 3
71087019828. 4

Question Number : 98 Question Id : 7108704958 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Aseptic fillers are sterilized by

1. H_2O_2 and hot air
2. Steam and hot air
3. Scalding water
4. Iodophore

Options :

71087019829. 1
71087019830. 2
71087019831. 3

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71087019832. 4

Question Number : 99 Question Id : 7108704959 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

If all the ducts are outside the air-conditioned space, leakage loss is assumed as

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

Options :

71087019833. 1

71087019834. 2

71087019835. 3

71087019836. 4

Question Number : 100 Question Id : 7108704960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements:

Statement I: According to the Second Law of Thermodynamics, heat will always conduct from higher temperature to lower temperature.

Statement II: In Fourier's law, the gradient $\frac{dt}{dx}$ is negative because temperature decreases with increasing values of x.

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

1. Both Statement I and Statement II are true
2. Both Statement I and Statement II are false
3. Statement I is correct but Statement II is false
4. Statement I is incorrect but Statement II is true

Options :

71087019837. 1
71087019838. 2
71087019839. 3
71087019840. 4

Question Number : 101 Question Id : 7108704961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The largest change of the measurement to which the instrument DOES NOT respond is known as

1. Drift
2. Dead band
3. Linearity
4. Backlash

Options :

71087019841. 1

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71087019842. 2
71087019843. 3
71087019844. 4

Question Number : 102 Question Id : 7108704962 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Bactotherm process involves

1. Bactofugation
2. UF and heat treatment
3. RO and heat treatment
4. Bactofugation and part-sterilisation

Options :

71087019845. 1
71087019846. 2
71087019847. 3
71087019848. 4

Question Number : 103 Question Id : 7108704963 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Pitting, a form of corrosion is caused by

A. Acids

B. Steam

C. Chlorine and its compounds

Choose the ***most appropriate*** answer from the options given below

1. A only
2. B only
3. C only
4. Both A and C

Options :

71087019849. 1
71087019850. 2
71087019851. 3
71087019852. 4

Question Number : 104 Question Id : 7108704964 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Unit of kinematic viscosity is

1. m^2/s
2. m^3/s
3. dyne $/cm^2$
4. Kg/m-s

Options :

71087019853. 1
71087019854. 2
71087019855. 3

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71087019856. 4

Question Number : 105 Question Id : 7108704965 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

When n = 1, the fluids are observed as

1. Pseudoplastic
2. Newtonian
3. Dilatant
4. Thixotropic

Options :

71087019857. 1

71087019858. 2

71087019859. 3

71087019860. 4

Question Number : 106 Question Id : 7108704966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following instruments measures the temperature of the source without direct contact?

1. Bimetallic cut out
2. Vapour pressure thermometer
3. Pyrometer
4. Thin film thermometer

Options :

71087019861. 1

71087019862. 2

71087019863. 3

71087019864. 4

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Question Number : 107 Question Id : 7108704967 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Steam infusers/injectors are used in

A. Direct type UHT

B. Indirect type UHT

C. Uperisation

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

1. A only
2. B only
3. C only
4. Both A and C

Options :

71087019865. 1

71087019866. 2

71087019867. 3

71087019868. 4

Question Number : 108 Question Id : 7108704968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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High-pressure side of vapour recompression system of refrigeration consists of

A Evaporator

B Condenser

C Compressor

D Receiver

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

1. Only A is correct
2. Only B is correct
3. Only B and C is correct
4. Only B, C and D are correct

Options :

71087019869. 1
71087019870. 2
71087019871. 3
71087019872. 4

Question Number : 109 Question Id : 7108704969 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In plate heat exchanger used for milk pasteurization, the pressure of pasteurized milk is kept higher than that of the heating or cooling medium to

1. Avoid contamination with heating or cooling medium
2. Get better heat transfer
3. Save heat energy
4. Avoid leakage of milk through plates

Options :

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71087019873. 1
71087019874. 2
71087019875. 3
71087019876. 4

Question Number : 110 Question Id : 7108704970 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

List I	**List II**
A. Filter	I. Treat air by adding heat
B. Heating chamber	II. Treat air by removing heat and moisture
C. Cooling coil	III. Pathway through which air flows from the room
D. Supply duct	IV. Clean the air

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

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

Options :

71087019877. 1
71087019878. 2
71087019879. 3
71087019880. 4

Question Number : 111 Question Id : 7108704971 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following food parameters is measured using BET equation?

1. Moisture content
2. EMC
3. Water activity
4. Dry matter

Options :

71087019881. 1
71087019882. 2
71087019883. 3
71087019884. 4

Question Number : 112 Question Id : 7108704972 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The least count of any instrument is taken as

1. Accuracy
2. Resolution
3. Precision
4. Linearity

Options :

71087019885. 1
71087019886. 2
71087019887. 3
71087019888. 4

Question Number : 113 Question Id : 7108704973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A:

The falling film evaporator can handle more viscous liquids than the rising film type.

Reason R:

The falling film evaporators are not suitable for heat sensitive products.

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 and **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 :

71087019889. 1
71087019890. 2
71087019891. 3
71087019892. 4

Question Number : 114 Question Id : 7108704974 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Insulation thickness of milk storage tanks is commonly

1. 5.0 – 7.5 cm
2. 1.5 – 2.5 cm
3. 8.0 – 10.0 cm
4. 10.0 – 15.0 cm

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Options :

71087019893. 1

71087019894. 2

71087019895. 3

71087019896. 4

Question Number : 115 Question Id : 7108704975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Elasticity is

1. Breakage
2. Reversible deformation
3. Irreversible deformation
4. Spring action

Options :

71087019897. 1

71087019898. 2

71087019899. 3

71087019900. 4

Question Number : 116 Question Id : 7108704976 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

R-12 is known as

1. Dichloro-difluoromethane
2. Monochloro-difluoromethane
3. Dichloro-trifluoromethane
4. Dichloro monoflouromethane

Options :

71087019901. 1

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71087019902. 2
71087019903. 3
71087019904. 4

Question Number : 117 Question Id : 7108704977 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is associated with electrodialysis?

1. Polymeric membrane
2. Composite inorganic membrane
3. Ion exchange membrane
4. Cellulose acetate membrane

Options :

71087019905. 1
71087019906. 2
71087019907. 3
71087019908. 4

Question Number : 118 Question Id : 7108704978 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following statements are correct?

A. In drying, the vapour pressure of water in the solid is more than outside

B. For the wet bulb, the greater the velocity, the more rapid is the rate of drying

C Water activity is important in the analysis of storage stability for dry foods

D The constant rate drying period occurs with the product at a wet-bulb temperature of the air

E Cabinet dryers give uniform drying of the product

Choose the correct answer from the options given below:

1. Only A and B are correct
2. Only B and C are correct
3. Only A, B, C and D are correct
4. Only A, B, D and E are correct

Options :

71087019909. 1
71087019910. 2
71087019911. 3
71087019912. 4

Question Number : 119 Question Id : 7108704979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following is true about microwaves?

A Can heat foods with water

B Can heat only liquid foods

C Can heat only foods containing water or dielectric components

D Can heat only pure water and emulsions

Choose the correct answer from the options given below:

1. Only A and B are correct
2. Only A and D are correct
3. Only A and C are correct
4. Only A, B and C are correct

Options :

71087019913. 1
71087019914. 2
71087019915. 3
71087019916. 4

Question Number : 120 Question Id : 7108704980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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Which of the following are the applications of scraped surface heat exchangers in the food processing industry?

A. Heating

B. Pasteurizing

C. Sterilizing

D. Whipping

E. Gelling

Choose the correct answer from the options given below:

1. Only A, B and C are correct
2. Only A, B, C and D are correct
3. Only A, B, C, D and E are correct
4. Only B, C, D and E are correct

Options :

71087019917. 1
71087019918. 2
71087019919. 3
71087019920. 4