

Notations :

- Options shown in **green** color and with  icon are correct.
- Options shown in **red** color and with  icon are incorrect.

Question Paper Name :	Food Technology 10th June 2024 Shift 2
Subject Name :	Food Technology
Creation Date :	2024-06-11 14:24:50
Duration :	120
Total Marks :	120
Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Food Technology

Group Number :	1
Group Id :	38382333
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	120

Mathematics

Section Id :	38382397
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10

Number of Questions to be attempted : 10
 Section Marks : 10
 Maximum Instruction Time : 0
 Sub-Section Number : 1
 Sub-Section Id : 38382397
 Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 3838234801 Question Type : MCQ Option Shuffling : Yes
 Display Question Number : Yes

Correct Marks : 1

If $P = \begin{pmatrix} 1 & 1 & 1 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix}$ is the modal matrix of $A = \begin{pmatrix} 1 & 1 & 0 \\ 0 & 2 & 2 \\ 0 & 0 & 3 \end{pmatrix}$ then the sum of all the

elements of $P^{-1}AP$ is

Options :

1. ✖ 4
2. ✖ 5
3. ✔ 6
4. ✖ 3

Question Number : 2 Question Id : 3838234802 Question Type : MCQ Option Shuffling : Yes
 Display Question Number : Yes

Correct Marks : 1

If the system of equations $kx + y + z = k - 1$, $x + ky + z = k - 1$ and $x + y + kz = k - 1$

have infinite solutions, then k is

Options :

1. ✖ 0
2. ✔ 1
3. ✖ 2
4. ✖ 3

Question Number : 3 Question Id : 3838234803 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The value of the integral $\int_C (2xy - x^2)dx + (x^2 + y^2)dy$ where C is the boundary of the

region enclosed by $y = x^2$ and $y^2 = x$ described in the positive sense is

Options :

1. ✖ -2

2. ✔ 0

3. ✖ -1

4. ✖ 2

Question Number : 4 Question Id : 3838234804 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Let $f(x) = \log x$. The number 'C' strictly between e^2 and e^3 such that its reciprocal

is equal to $\frac{f(e^3) - f(e^2)}{e^3 - e^2}$ is

Options :

1. ✖ $(e - 1)$

2. ✖ $(1 - e)$

3. ✖ $(e^2 - 1)$

4. ✔ $(e^3 - e^2)$

Question Number : 5 Question Id : 3838234805 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The solution of the differential equation $(D^2 + 2)y = x^2$ is

Options :

1. ✖ $C_1 \cos \sqrt{2}x + C_2 \sin \sqrt{2}x$

2. ✓ $C_1 \cos \sqrt{2}x + C_2 \sin \sqrt{2}x + \frac{1}{2}(x^2 - 1)$

3. ✗ $C_1 e^{\sqrt{2}x} + C_2 e^{-\sqrt{2}x} x + \frac{1}{2}(x^2 - 1)$

4. ✗ $C_1 e^{-\sqrt{2}x} + C_2 e^{\sqrt{2}x} x + (x^2 + 1)$

Question Number : 6 Question Id : 3838234806 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

If $L\{f(t)\} = \frac{1}{s} e^{-1/s}$ then $L\{e^{-t} f(3t)\} =$

Options :

1. ✓ $\frac{e^{-3/s+1}}{s+1}$

2. ✗ $\frac{e^{-3/s}}{s+1}$

3. ✗ $\frac{e^{-1/s+1}}{s+1}$

4. ✗ $\frac{1}{3} \cdot \frac{e^{-3/s+1}}{s+1}$

Question Number : 7 Question Id : 3838234807 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The table below gives values of the function $f(x) = \frac{1}{x}$ at 5 points of x .

x	1	1.25	1.5	1.75	2
$f(x)$	1	0.8	0.6667	0.57143	0.5

The approximate value of $\int_1^2 \frac{1}{x} dx$ by using Simpson's $\left(\frac{1}{3}\right)^{rd}$ rule is

Options :

1. ✖ 0.89324
2. ✖ 0.96525
3. ✖ 0.79332
4. ✔ 0.69325

Question Number : 8 Question Id : 3838234808 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The order of the convergence of bisection method is

Options :

1. ✖ 4
2. ✖ 2
3. ✔ 1
4. ✖ 3

Question Number : 9 Question Id : 3838234809 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

If X is a continuous random variable whose probability density function is given by

$$f(x) = \begin{cases} k(4x - 2x^2), & 0 < x < 2 \\ 0, & \text{otherwise} \end{cases} \quad \text{then the value of } k \text{ is}$$

Options :

1. ✔ $\frac{3}{8}$
2. ✖ $\frac{5}{8}$
3. ✖ $\frac{7}{8}$
4. ✖ 1

Question Number : 10 Question Id : 3838234810 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

A fair coin is tossed three times. Let X be the number of tails appearing and its distribution is as follows.

$X = x$	0	1	2	3
$P(X = x)$	$1/8$	$3/8$	$3/8$	$1/8$

Then the variance of X is

Options :

1. ✖ $\frac{1}{4}$

2. ✔ $\frac{3}{4}$

3. ✖ $\frac{5}{4}$

4. ✖ $\frac{7}{4}$

Food Technology

Section Id :	38382398
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	110
Number of Questions to be attempted :	110
Section Marks :	110
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	38382398
Question Shuffling Allowed :	Yes

Question Number : 11 Question Id : 3838234811 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Which of the following is the primary product of photosynthesis

Options :

1. ✖ Proteins
2. ✖ Lipids
3. ✖ Vitamins
4. ✔ Carbohydrates

Question Number : 12 Question Id : 3838234812 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

A complex group of reactions is

Options :

1. ✖ Caramelization
2. ✖ Amylose
3. ✔ Maillard
4. ✖ Enzymatic

Question Number : 13 Question Id : 3838234813 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

What is the generic name of glycans?

Options :

1. ✔ Polysaccharides
2. ✖ Monosaccharides
3. ✖ Oligosaccharides

4. ✖ Disaccharides

Question Number : 14 Question Id : 3838234814 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Which of the following is an extract from red algae

Options :

1. ✔ Carrageenan

2. ✖ Algin

3. ✖ Agar

4. ✖ Xanthan

Question Number : 15 Question Id : 3838234815 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

_____ serve as a fuel molecule in foods

Options :

1. ✖ Proteins

2. ✖ Minerals

3. ✖ Vitamins

4. ✔ Lipids

Question Number : 16 Question Id : 3838234816 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The change that a lipid undergoes leading to an undesirable flavor and odour is known as

Options :

1. ✔ Rancidity

2. ✖ Polymerization

3. ✖ Crystallization

4. ✖ Saturation

Question Number : 17 Question Id : 3838234817 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

_____ is an example for visible fats

Options :

1. ✖ Pulses

2. ✖ Milk

3. ✖ Cheese

4. ✔ Butter

Question Number : 18 Question Id : 3838234818 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Percentage of proteins in eggs is

Options :

1. ✖ 14 - 15

2. ✔ 13 - 14

3. ✖ 18 - 20

4. ✖ 10 - 12

Question Number : 19 Question Id : 3838234819 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Chemically Annatto pigments belongs to _____ group

Options :

1. ✓ Carotenoids
2. ✗ Flavanoids
3. ✗ Heme Pigment
4. ✗ Pheols

Question Number : 20 Question Id : 3838234820 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

_____ process is involved in the manufacture of cheese

Options :

1. ✗ Lipoxygenases
2. ✓ Lipases
3. ✗ Ascorbic oxidases
4. ✗ Peroxidases

Question Number : 21 Question Id : 3838234821 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The percentage of minerals in human body is

Options :

1. ✓ 24
2. ✗ 30
3. ✗ 28
4. ✗ 32

Question Number : 22 Question Id : 3838234822 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Which of the following is the most abundant mineral in the human body?

Options :

1. ✖ Mg
2. ✔ Ca
3. ✖ K
4. ✖ Na

Question Number : 23 Question Id : 3838234823 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Depending on the climate, the daily intake of sodium chloride in adults vary within the range of

Options :

1. ✖ 10 to 20 g
2. ✖ 10 to 24 g
3. ✔ 16 to 24 g
4. ✖ 15 to 20 g

Question Number : 24 Question Id : 3838234824 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Glucose is stored in animals in the form of _____

Options :

1. ✔ Glycogen
2. ✖ Starch
3. ✖ Amyopectin
4. ✖ Waxes

Question Number : 25 Question Id : 3838234825 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

WHO headquarters is located at

Options :

1. ✘ Rome
2. ✔ Geneva
3. ✘ Washington D.C
4. ✘ London

Question Number : 26 Question Id : 3838234826 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Cell arrangement of microorganisms fall in

Options :

1. ✘ Cultural characteristics
2. ✘ Genetic characteristics
3. ✘ Ecological characteristics
4. ✔ Morphological characteristics

Question Number : 27 Question Id : 3838234827 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The logarithmic order of death for bacterial population is described by

Options :

1. ✘ Decimal reduction time
2. ✔ Death rate curve
3. ✘ Death production curve

4. ✖ Death reduction curve

Question Number : 28 Question Id : 3838234828 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The parameters of plant and animal tissues that are inherent part of tissues are referred to as

Options :

1. ✔ Intrinsic parameters
2. ✖ Antimicrobial parameters
3. ✖ Extrinsic parameters
4. ✖ Biological parameters

Question Number : 29 Question Id : 3838234829 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The bacteria that grows in both aerobic and anaerobic conditions is termed as

Options :

1. ✖ Aerophiles
2. ✔ Facultative anaerobes
3. ✖ Mesophiles
4. ✖ Eosinophiles

Question Number : 30 Question Id : 3838234830 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

A yellow discoloration of vacuum packaged luncheon style meat is caused by

Options :

1. ✖ *Pseudomonas mephitica*
2. ✖ *Pseudomonus putrefaciens*

3. ✓ Enterococcus casseliflavus

4. ✗ Lactobacillus

Question Number : 31 Question Id : 3838234831 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The minimum and maximum temperatures required for the shigella species to grow is

Options :

1. ✗ 10 °C and 40 °C

2. ✓ 10 °C and 48 °C

3. ✗ 15 °C and 45 °C

4. ✗ 15 °C and 65 °C

Question Number : 32 Question Id : 3838234832 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Spoilage of bacteria in butter is known as surface taint and is caused by

Options :

1. ✓ Pseudomonas putrefaciens

2. ✗ Cladosporium

3. ✗ Aspergillus

4. ✗ Penicillium

Question Number : 33 Question Id : 3838234833 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Vinegar is produced by alcoholic fermentation followed by acetic fermentation with

Options :

1. ✖ Saccharomyces
2. ✖ Lactic acid bacteria
3. ✔ Acetobacter
4. ✖ Antigens

Question Number : 34 Question Id : 3838234834 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The microorganisms used for the industrial purpose is

Options :

1. ✖ Molds
2. ✖ Bacteria
3. ✔ Yeast
4. ✖ Streptococcus

Question Number : 35 Question Id : 3838234835 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

For preparation of wines, commonly used fermenting organism is

Options :

1. ✔ Saccharomyces
2. ✖ Endomycopsis fibliges
3. ✖ Leuconostoc messenteroides
4. ✖ Rizoporus oligosporous

Question Number : 36 Question Id : 3838234836 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

At what temperature, denaturation and coagulation of proteins takes place

Options :

1. ✖ 70 °C
2. ✖ 60 °C
3. ✔ 50 °C
4. ✖ 65 °C

Question Number : 37 Question Id : 3838234837 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Which of the following is done as premilling treatment to improve the quality of rice

Options :

1. ✖ Soaking
2. ✔ Parboiling
3. ✖ Steaming
4. ✖ Single boiling

Question Number : 38 Question Id : 3838234838 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The main source of proteins in vegetarian diet is

Options :

1. ✖ Wheat
2. ✔ Pulses
3. ✖ Vegetables
4. ✖ Rice

Question Number : 39 Question Id : 3838234839 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

What is the moisture content that aids a grain to sprout?

Options :

1. ✘ 40 - 45%
2. ✘ 25 - 30%
3. ✘ 25 - 35%
4. ✔ 30 - 35%

Question Number : 40 Question Id : 3838234840 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

In cereal group, the highest protein percentage is in

Options :

1. ✘ Barley
2. ✔ Wheat
3. ✘ Rice
4. ✘ Buckwheat

Question Number : 41 Question Id : 3838234841 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The major sources of starch is

Options :

1. ✘ Bran
2. ✘ Husk
3. ✔ Endosperm

4. ✖ Germ

Question Number : 42 Question Id : 3838234842 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The principal protein of wheat flour is

Options :

- 1. ✖ Zein
- 2. ✔ Gluten
- 3. ✖ Karfirin
- 4. ✖ Oryzine

Question Number : 43 Question Id : 3838234843 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Which one of the following has higher fat content?

Options :

- 1. ✔ Oil seeds
- 2. ✖ Maize
- 3. ✖ Millets
- 4. ✖ Wheat

Question Number : 44 Question Id : 3838234844 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Which among the following is rich source of protein?

Options :

- 1. ✖ Jowar
- 2. ✔ Soy

3. ✖ Vegetable

4. ✖ Rice

Question Number : 45 Question Id : 3838234845 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The botanical name for pearl millet is

Options :

1. ✖ Panicum miliaceum

2. ✖ Elensine coracana

3. ✖ Echinochola crus-galli

4. ✔ Pennisetum glaucum

Question Number : 46 Question Id : 3838234846 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Boiling point elevation for different solutions can be viewed by using

Options :

1. ✖ Moody chart

2. ✖ Steam tables

3. ✔ Duhring plot

4. ✖ Both Moody chart and Steam tables

Question Number : 47 Question Id : 3838234847 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The total iron contaminants in lemon juices mg/kg as per alimentarius is

Options :

1. ✓ 15

2. ✗ 20

3. ✗ 25

4. ✗ 10

Question Number : 48 Question Id : 3838234848 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

In case of pure sucrose solutions, only soluble solids can be measured with

Options :

1. ✗ Baume

2. ✗ Twaddle hydrometer

3. ✓ Brix

4. ✗ Abbe refractometer

Question Number : 49 Question Id : 3838234849 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Marmalade is prepared from

Options :

1. ✗ Apple

2. ✗ Grapes

3. ✓ Citrus

4. ✗ Pomegranate

Question Number : 50 Question Id : 3838234850 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The specification of benzoic acid in canned products as per FPO

Options :

1. ✘ 650 ppm
2. ✔ 600 ppm
3. ✘ 500 ppm
4. ✘ 620 ppm

Question Number : 51 Question Id : 3838234851 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The FPO specifications for total soluble solids in jams is

Options :

1. ✔ Not less than 25%
2. ✘ Not less than 30%
3. ✘ More than 25%
4. ✘ More than 50%

Question Number : 52 Question Id : 3838234852 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Enzymes used for clarification of fruit juice is

Options :

1. ✘ Xylanase
2. ✘ Protease
3. ✘ Cellulase
4. ✔ Pectinase

Question Number : 53 Question Id : 3838234853 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The specific gravity of grape vinegar varies from

Options :

1. ✓ 1.0129 to 1.0213
2. ✗ 1.0129 to 1.2136
3. ✗ 1.129 to 1.2130
4. ✗ 1.129 to 1.3215

Question Number : 54 Question Id : 3838234854 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The head space for canned products, as per FPO, is

Options :

1. ✗ More than 1.6 cm
2. ✗ More than 1.8 cm
3. ✓ Not more than 1.6 cm
4. ✗ Not more than 1.8 cm

Question Number : 55 Question Id : 3838234855 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The caffeine added to carbonated beverages should not exceed

Options :

1. ✗ 300 ppm
2. ✗ 250 ppm
3. ✓ 200 ppm

4. ✖ 320 ppm

Question Number : 56 Question Id : 3838234856 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Lean meat is considered as a good source of _____

Options :

- 1. ✖ Calcium
- 2. ✔ Iron
- 3. ✖ Protein
- 4. ✖ Vitamins

Question Number : 57 Question Id : 3838234857 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The basic pigment of fresh meat is

Options :

- 1. ✖ Hemoglobin
- 2. ✔ Myoglobin
- 3. ✖ Albumin
- 4. ✖ Serum

Question Number : 58 Question Id : 3838234858 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

From consumer perception the important factor of meat quality is

Options :

- 1. ✔ Tenderness

2. ✖ Maturation
3. ✖ Curing
4. ✖ Appearance

Question Number : 59 Question Id : 3838234859 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Sweet cure bacon is smoked directly after

Options :

1. ✖ Canning
2. ✔ Curing
3. ✖ Pickling
4. ✖ Drying

Question Number : 60 Question Id : 3838234860 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The cold smoking of meat is usually done at

Options :

1. ✔ 32– 38 °C for 15- 18 hr
2. ✖ 32– 40 °C for 18- 20 hr
3. ✖ 32– 42 °C for 15- 18 hr
4. ✖ 32– 35 °C for 16- 18 hr

Question Number : 61 Question Id : 3838234861 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

At the time of filling, hot sauce temperature should not be less than

Options :

1. ✖ 75 °C
2. ✖ 80 °C
3. ✔ 85 °C
4. ✖ 90 °C

Question Number : 62 Question Id : 3838234862 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

In the manufacture of fermented sausages, it contains

Options :

1. ✖ 50 to 80% of lean meat
2. ✖ 50 to 60% of lean meat
3. ✖ 50 to 65% of lean meat
4. ✔ 50 to 70% of lean meat

Question Number : 63 Question Id : 3838234863 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

An important ingredient used in the preparation of fermented meat sausage is

Options :

1. ✖ Protein
2. ✔ Fat
3. ✖ Bones
4. ✖ Muscle

Question Number : 64 Question Id : 3838234864 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The essential structure unit of all muscles is

Options :

1. ✓ Fibre
2. ✗ Serum
3. ✗ Blood
4. ✗ Cellulose

Question Number : 65 Question Id : 3838234865 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The proportion of iron present in a soluble haem decreases from 65 to 22% when it is

Options :

1. ✓ Cooked at 60 °C
2. ✗ Cooked at 70 °C
3. ✗ Cooked at 90 °C
4. ✗ Cooked at 40 °C

Question Number : 66 Question Id : 3838234866 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The principal function of lactose is to supply

Options :

1. ✗ Proteins
2. ✓ Energy
3. ✗ Vitamins
4. ✗ Minerals

Question Number : 67 Question Id : 3838234867 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Which of the following exists only in milk in the form of calcium caseinate phosphate complex?

Options :

1. ✖ Albumin
2. ✔ Casein
3. ✖ Glycerides
4. ✖ Niacin

Question Number : 68 Question Id : 3838234868 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The titratable acidity value of buffalo milk varies from

Options :

1. ✖ 0.15 to 0.17
2. ✖ 0.13 to 0.14
3. ✔ 0.14 to 0.15
4. ✖ 0.20 to 0.25

Question Number : 69 Question Id : 3838234869 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

For normal and fresh sweet cow milk, the pH value usually varies between

Options :

1. ✔ 6.4 to 6.6
2. ✖ 6.7 to 6.8

3. ✖ 6.9 to 7.2

4. ✖ 6.3 to 6.5

Question Number : 70 Question Id : 3838234870 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Higher pH values for fresh milk indicates

Options :

1. ✖ Fungal infection

2. ✔ Mastitis

3. ✖ Viral infection

4. ✖ Molds infections

Question Number : 71 Question Id : 3838234871 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Pycnometer is used to determine

Options :

1. ✖ pH

2. ✖ Acidity

3. ✔ Density & Specific gravity

4. ✖ Milk fat

Question Number : 72 Question Id : 3838234872 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Isoelectric point of casein pH is

Options :

1. ✖ 4.3

2. ✔ 4.6

3. ✖ 5.3

4. ✖ 5.6

Question Number : 73 Question Id : 3838234873 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

In bottle pasteurization, raw milk is heated to

Options :

1. ✖ 60- 63 °C for 30 seconds

2. ✔ 63-66 °C for 30 minutes

3. ✖ 65-70 °C for 30 seconds

4. ✖ 68-75 °C for 30 minutes

Question Number : 74 Question Id : 3838234874 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

As per PFA rules of 1976, the standard milk should contain

Options :

1. ✔ 4.5% fat & 8.5 % SNF

2. ✖ 4.0% fat & 9.0 % SNF

3. ✖ 3.5% fat & 8.5 % SNF

4. ✖ 3.5% fat & 9.0 % SNF

Question Number : 75 Question Id : 3838234875 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The Yeasty flavor in cream is due to

Options :

1. ✖ Using dirty utensils
2. ✖ Growth of proteolytic bacteria in cream
3. ✖ Lipase activity
4. ✔ Growth of lactose fermenting yeast

Question Number : 76 Question Id : 3838234876 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

In food industry, the maximum waste streams can be monitored by

Options :

1. ✖ Waste removal
2. ✔ Reuse or recycling
3. ✖ Biological removing
4. ✖ Chemical decomposition

Question Number : 77 Question Id : 3838234877 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Which of the following is a practical process for reducing pollution and receiving by-product from food processing waste water.

Options :

1. ✖ Softening
2. ✖ Ion exchange
3. ✖ Neutralization
4. ✔ Coagulation

Question Number : 78 Question Id : 3838234878 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The major technology that is used to reduce environmental pollution by waste or waste water discharges from food industry is

Options :

1. ✖ Coagulation
2. ✔ Separation
3. ✖ Crystallization
4. ✖ Sedimentation

Question Number : 79 Question Id : 3838234879 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The consumption and discharge of water by food industries in meat processing is minimized by

Options :

1. ✔ Water reuse
2. ✖ Less water usage
3. ✖ More water usage
4. ✖ No water usage

Question Number : 80 Question Id : 3838234880 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Dairy equipment is regularly cleaned using

Options :

1. ✔ Cleaning with detergent

2. ✖ Rinse cleaning with water
3. ✖ Water pressure cleaning
4. ✖ Clean in place

Question Number : 81 Question Id : 3838234881 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The residence time and temperature for juice extraction are about

Options :

1. ✔ 120 – 150 minutes & 24 °C
2. ✖ 130 – 140 minutes & 21 °C
3. ✖ 125 – 150 minutes & 20 °C
4. ✖ 130 – 160 minutes & 25 °C

Question Number : 82 Question Id : 3838234882 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Which of the following is not a desirable characteristic of a manometer fluid?

Options :

1. ✖ It should be free from capillary effects
2. ✔ It should have high viscosity
3. ✖ It should have negligible surface tension
4. ✖ It should be non-corrosive

Question Number : 83 Question Id : 3838234883 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

For a fully developed flow through a pipe, the ratio of the maximum velocity to the average velocity is

Options :

1. ✖ 1
2. ✔ 2
3. ✖ $\sqrt{2}$
4. ✖ 4

Question Number : 84 Question Id : 3838234884 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Which of the following pump is kinetic pump?

Options :

1. ✔ Centrifugal pump
2. ✖ Rotary pump
3. ✖ Gear pump
4. ✖ Vane pump

Question Number : 85 Question Id : 3838234885 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

In a rotameter as the flow rate increases, the float

Options :

1. ✖ Rotates at higher speed
2. ✖ Rotates at lower speed
3. ✔ Rises in the tube
4. ✖ Drops in the tube

Question Number : 86 Question Id : 3838234886 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The prandtl number is the

Options :

1. ✓ Ratio of kinematic viscosity to thermal diffusivity
2. ✗ Ratio of thermal diffusivity to kinematic viscosity
3. ✗ Product of thermal diffusivity and kinematic viscosity
4. ✗ Ratio of absolute viscosity to thermal conductivity

Question Number : 87 Question Id : 3838234887 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

In forced convection, fluid moves under the influence of

Options :

1. ✓ Changes in fluid pressure produced by external work
2. ✗ Buoyant forces arising from changes in density
3. ✗ Elastic forces
4. ✗ Surface tension forces

Question Number : 88 Question Id : 3838234888 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Which law states that “the conductive heat flux is linearly proportional to the temperature gradient”

Options :

1. ✗ Newton law
2. ✗ Pascal law

3. ✓ Fourier's law

4. ✗ Stefan-Boltzmann Law

Question Number : 89 Question Id : 3838234889 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Fourier's law of heat conduction gives the heat flow for

Options :

1. ✗ Irregular surfaces

2. ✗ Non-uniform temperature surfaces

3. ✓ One dimensional case only

4. ✗ Two dimensional case only

Question Number : 90 Question Id : 3838234890 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The temperature difference correction factor F_T , is defined as the

Options :

1. ✗ Ratio of the LMTD to the true temperature

2. ✓ Ratio of the true temperature difference to the LMTD

3. ✗ Difference of the true temperature difference and the LMTD

4. ✗ Arithmetic mean of the true temperature difference and the LMTD

Question Number : 91 Question Id : 3838234891 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The ratio of the increment in surface energy to the total energy imparted to the material during size reduction is called as

Options :

1. ✖ Mechanical efficiency
2. ✔ Crushing efficiency
3. ✖ Energy efficiency
4. ✖ Work efficiency

Question Number : 92 Question Id : 3838234892 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

In homogenization, size reduction is achieved by the action of

Options :

1. ✖ Compression forces
2. ✖ Impact forces
3. ✖ Attrition forces
4. ✔ Shear forces

Question Number : 93 Question Id : 3838234893 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Driving force in case of filtration by a centrifuge is the

Options :

1. ✖ Speed of the centrifuge
2. ✔ Centrifugal pressure exerted by the liquid
3. ✖ Narrow diameter of the vessel
4. ✖ Formation of highly porous cake

Question Number : 94 Question Id : 3838234894 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

A gravity decanter is meant for the separation of two

Options :

1. ✖ Immiscible liquids of same densities
2. ✖ Miscible liquids of same densities
3. ✔ Immiscible liquids of different densities
4. ✖ Miscible liquids of different densities

Question Number : 95 Question Id : 3838234895 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Nutrient agar gels at

Options :

1. ✔ 35 °C – 40 °C
2. ✖ 80 °C – 90 °C
3. ✖ 105 °C – 110 °C
4. ✖ 95 °C – 100 °C

Question Number : 96 Question Id : 3838234896 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

How is steam economy calculated in an evaporation operation?

Options :

1. ✔ Mass of evaporated liquid/ Mass of heating steam
2. ✖ Mass of evaporated liquid + Mass of heating steam
3. ✖ Mass of evaporated liquid x Mass of heating steam
4. ✖ Mass of heating steam/ Mass of evaporated liquid

Question Number : 97 Question Id : 3838234897 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The formula $\frac{P}{n^3 D_a^5 \rho}$ denotes which of the following number in impeller problems?

Options :

1. ✖ Weber number
2. ✖ Froude number
3. ✔ Power number
4. ✖ Euler number

Question Number : 98 Question Id : 3838234898 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

How does temperature affect nucleation?

Options :

1. ✖ When temperature increases the nucleation increases
2. ✔ When temperature increases the nucleation decreases
3. ✖ When temperature increases the nucleation increases and then decreases
4. ✖ Nucleation is not dependent on temperature

Question Number : 99 Question Id : 3838234899 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The maximum quantity of water vapor that air can contain at a given temperature, without phase separation is called as

Options :

1. ✖ Apparent humidity
2. ✖ Absolute humidity

3. ✖ Relative humidity

4. ✔ Saturation humidity

Question Number : 100 Question Id : 3838234900 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

What happens to the drying rate when it reaches critical moisture content?

Options :

1. ✖ It becomes constant

2. ✖ It increases gradually

3. ✔ It starts declining

4. ✖ Drying stops

Question Number : 101 Question Id : 3838234901 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

FSSAI stands for

Options :

1. ✔ Food Safety and Standards Authority of India

2. ✖ Food Safe Security Authorization of India

3. ✖ Food Security and Supply Auditing of India

4. ✖ Food Standards Security Authority of India

Question Number : 102 Question Id : 3838234902 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Which of the following is a scientific discipline to describe handling, preparing and storage of food to prevent food borne illness

Options :

1. ✖ Food quality
2. ✔ Food safety
3. ✖ Food standards
4. ✖ Food poisoning

Question Number : 103 Question Id : 3838234903 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The requirements for food safety management systems are specified by

Options :

1. ✔ ISO-22000
2. ✖ ISO-22004
3. ✖ ISO-22006
4. ✖ ISO-22008

Question Number : 104 Question Id : 3838234904 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

SSOP stands for

Options :

1. ✖ Security Standard Operation Procedure
2. ✖ Safe Standard Operation Procedure
3. ✔ Sanitation Standard Operation Procedure
4. ✖ Safe Security Operation procedure

Question Number : 105 Question Id : 3838234905 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Which of the following is a useful tool that can be of great value to increase manufacturing efficiency

Options :

1. ✓ Statistical quality control
2. ✗ Quality control
3. ✗ Food safety and quality control
4. ✗ Security and safety control

Question Number : 106 Question Id : 3838234906 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

FSSAI head office is located at

Options :

1. ✗ Bangalore
2. ✓ Delhi
3. ✗ Calcutta
4. ✗ Mumbai

Question Number : 107 Question Id : 3838234907 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The quality control and hygienic manufacturing of meat products for domestic consumption is ensured by

Options :

1. ✗ FPO
2. ✗ PFA
3. ✓ MFPO

4. ✖ FSSAI

Question Number : 108 Question Id : 3838234908 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

APEDA is established in the year

Options :

1. ✖ 1986

2. ✖ 1947

3. ✔ 1985

4. ✖ 1987

Question Number : 109 Question Id : 3838234909 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Which of the following organization specifies quality system models for quality assurance in production and installation

Options :

1. ✖ ISO-9000

2. ✖ ISO-9001

3. ✖ ISO-9006

4. ✔ ISO-9002

Question Number : 110 Question Id : 3838234910 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The maximum limits of synthetic food colors permitted is

Options :

1. ✔ 100 ppm of final product

2. ✖ 200 ppm of final product
3. ✖ 150 ppm of final product
4. ✖ 180 ppm of final product

Question Number : 111 Question Id : 3838234911 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Example for Class-II preservative is

Options :

1. ✖ Sugar
2. ✖ Salt
3. ✔ Benzoic Acid
4. ✖ Honey

Question Number : 112 Question Id : 3838234912 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

For fruit juices, preservatives added in tin bottles or pouches is limited to

Options :

1. ✖ 250 ppm
2. ✖ 180 ppm
3. ✔ 200 ppm
4. ✖ 120 ppm

Question Number : 113 Question Id : 3838234913 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

The HACCP system is based on _____ principles

Options :

1. ✓ 7
2. ✗ 9
3. ✗ 11
4. ✗ 12

Question Number : 114 Question Id : 3838234914 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

Marine Products Exports Development Authority is located at

Options :

1. ✗ Bangalore
2. ✓ Kochi
3. ✗ Calcutta
4. ✗ Mumbai

Question Number : 115 Question Id : 3838234915 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Correct Marks : 1

World Food Safety Day is observed on

Options :

1. ✓ June 7
2. ✗ October 16
3. ✗ April 7
4. ✗ March 22

Question Number : 116 Question Id : 3838234916 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

HACCP stands for

Options :

1. ✓ Hazard Analysis and Critical Control Point
2. ✗ Hazard And Critical Certification Points
3. ✗ Hazard And Critical Certification Policy
4. ✗ Hazard Analysis and Critical Control Policy

Question Number : 117 Question Id : 3838234917 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

The content of citric acid percentage in orange is about

Options :

1. ✗ 0.32
2. ✗ 0.65
3. ✓ 0.98
4. ✗ 1.33

Question Number : 118 Question Id : 3838234918 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes

Correct Marks : 1

Nutritional labelling was first recommended by

Options :

1. ✓ FDA
2. ✗ AGMARK
3. ✗ FPO
4. ✗ PFA

Question Number : 119 Question Id : 3838234919 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

Food safety plays an important role in

Options :

1. ✘ Food manufacture
2. ✘ Contaminant foods
3. ✘ Food supply
4. ✔ Modern food economics

Question Number : 120 Question Id : 3838234920 Question Type : MCQ Option Shuffling : Yes
Display Question Number : Yes

Correct Marks : 1

The most hygienic way of drying hands is by using

Options :

1. ✔ A warm air dryer
2. ✘ A hand towels
3. ✘ The dish cloth
4. ✘ The apron