National Testing Agency

Question Paper Name :	Food Technology 17th September Shift 2
Subject Name :	Food Technology
Creation Date :	2021-09-17 18:54:38
Duration :	120
Total Marks :	480
Display Marks:	Yes

Food Technology

Group Number.	Į.
Group Id :	190889109
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

Group Number:

Part A: General Knowledge

Section Id :	190889251
Section Number :	1
Section type :	Online

Mandatory or Optional: Mandatory

Number of Questions: 20

Number of Questions to be attempted: 20

Section Marks: 80

Enable Mark as Answered Mark for Review and

Clear Response:

Yes

Sub-Section Number: 1

Sub-Section Id: 190889291

Question Shuffling Allowed : Yes

Question Number: 1 Question Id: 19088912382 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following is the device used to measure the power and speed of the wind?

1. Avometer

- 2. Anemometer
- 3. Airometer
- 4. Aviontimeter

Options:

19088949421.1

19088949422.2

19088949423.3

19088949424.4

Question Number: 2 Question Id: 19088912383 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Optical fibre used the concept of which of the following?

- 1. Reflection
- 2. Refraction
- 3. Total internal reflection
- 4. Total internal refraction

Options:

19088949425.1

19088949426.2

19088949427.3

19088949428.4

Question Number: 3 Question Id: 19088912384 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Yellow vein mosaic is the viral disease of which of the following plants?

- 1. Ladyfinger
- 2. Papaya
- 3. Sugarcane
- 4. Banana

Options:

19088949429.1

19088949430. 2

19088949431.3

19088949432.4

Question Number: 4 Question Id: 19088912385 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following organ(s) is affected by Mumps disease?

- 1. Entire body
- 2. Skin
- 3. Eye
- 4. Parotid

Options:

19088949433.1

19088949434. 2

19088949435.3

Question Number: 5 Question Id: 19088912386 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following is the chemical name of vitamin B₂?

- 1. Riboflavin
- 2. Calciferol
- 3. Pyridoxin
- 4. Niacin

Options:

19088949437.1

19088949438.2

19088949439.3

19088949440.4

Question Number: 6 Question Id: 19088912387 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following is not the input unit of the computer?

- 1. Mouse
- 2. Keyboard
- 3. Screen
- 4. Scanner

Options:

19088949441.1

19088949442. 2

19088949443.3

19088949444.4

Question Number: 7 Question Id: 19088912388 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

The digital computer operates on which of the following principle?

- 1. Measurement
- 2. Calculation
- 3. Logical
- 4. Electrification

Options:

19088949445.1

19088949446. 2

19088949447.3

19088949448.4

Question Number: 8 Question Id: 19088912389 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

The non-cooperation movement of Gandhiji was launched in which of the following year?

- 1. 1915
- 2 1922
- 3. 1920
- 4. 1930

Options:

19088949449.1

19088949450. 2

19088949451.3

19088949452. 4

Question Number: 9 Question Id: 19088912390 Question Type: MCQ Option Shuffling: No Is

Question Mandatory: No

An Islamic revivalist movement named Wahabi movement was founded by which of the following person?

- 1. Sian Saheb
- 2. Syed Ahmed
- 3. Haji Shariat-Allah
- 4. DaduMian

Options:

19088949453.1

19088949454. 2

19088949455.3

19088949456. 4

Question Number: 10 Question Id: 19088912391 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following is considered as the "Magna Carta of England Education in India"?

- 1. Hunter education commission
- 2 Lord Macaulay's Minute
- 3. Wood's Despatch
- 4. Thomas Babington Macaulay

Options:

19088949457.1

19088949458. 2

19088949459.3

19088949460.4

Question Number: 11 Question Id: 19088912392 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which of the following nutrient does not come under the ambit of 'macro-nutrients in Soil Health Card?

- 1. Nitrogen
- 2. Zinc
- 3. Phosphorous
- 4. Potassium

Options:

19088949461.1

19088949462. 2

19088949463.3

19088949464.4

Question Number: 12 Question Id: 19088912393 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Cole crops, root crops and legumes come under the ambit of which of the following?

- I. Olericulture
- 2. Pomology
- 3. Viticulture
- 4. Arboriculture

Options:

19088949465.1

19088949466. 2

19088949467.3

19088949468.4

Question Number: 13 Question Id: 19088912394 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

The study of individual trees, shrubs, vines, and perennial woody plants is known as which of the following?

- I Turf management
- 2. Arboriculture
- 3. Pomology
- 4. Viticulture

Options:

19088949469.1

19088949470.2

19088949471.3

19088949472.4

Question Number: 14 Question Id: 19088912395 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

The ministry is implementing MIDH (Mission for Integrated Development of Horticulture) with effect from which of the following year?

- 1. 2012-13
- 2. 2019-20
- 3. 2015-16
- 4. 2014-15

Options:

19088949473.1

19088949474. 2

19088949475. 3

19088949476.4

Question Number: 15 Question Id: 19088912396 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

The interaction of soils with living things, particularly plants are well known as which of the following?

- 1. Edaphology
- 2. Pedology
- 3. Soil zoology
- 4. Pedogenesis

Options:

19088949477.1

19088949478. 2

19088949479.3

19088949480.4

Question Number: 16 Question Id: 19088912397 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following systems has also incorporated social aspects in itself?

- 1. Landscaping
- 2. Permaculture
- Horticulture
- 4. Forest gardening

Options:

19088949481.1

19088949482. 2

19088949483.3

19088949484.4

Question Number: 17 Question Id: 19088912398 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

What do you term the phenomenon whereby the specific gene is added to the plant for producing a desirable phenotype?

- 1. Genetic manipulation
- 2. Genetic recombination
- 3. Genetic modification
- 4. Genetic hybridisation

Options:

19088949485.1

19088949486. 2

19088949487.3

19088949488.4

Question Number: 18 Question Id: 19088912399 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

What is the focus of the participatory plant breeding program?

- 1. Scientists
- 2. Plants
- 3. Environment
- 4. Farmers

Options:

19088949489.1

19088949490.2

19088949491.3

19088949492.4

Question Number: 19 Question Id: 19088912400 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

How do you term the form of agriculture, in which, industrialized production of crops and animal products takes place?

- 1. Manufactured agriculture
- 2. Modern agriculture
- 3. Industrial agriculture
- 4. Mechanistic agriculture

Options:

19088949493.1

19088949494, 2

19088949495.3

19088949496.4

Question Number: 20 Question Id: 19088912401 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Micro-irrigation fund of Rs. 5.000 crore has been placed with which of the following organization?

- 1. NABARD
- 2. IDBI
- 3. SBI
- 4. RRBs

Options:

19088949497.1

19088949498. 2

19088949499.3

19088949500.4

Part B Core : Dairy Science: Dairy Technology & Food Technology

Section Id: 190889252

Section Number: 2

Section type :	Onl	ine
Mandatory or Optional :	Mai	ndatory
Number of Questions :	50	
Number of Questions to be attempte	ed: 50	
Section Marks :	200	
Enable Mark as Answered Mark for R		
Clear Response :	Yes	
Sub-Section Number :	1	
Sub-Section Id :	190	889292
Question Shuffling Allowed :	Yes	
Question Number : 21 Question Id :	9088912402 Quest	ion Type : MCQ Option Shuffling : No
Is Question Mandatory : No		
Correct Marks : 4 Wrong Marks : 1		
The casein fraction which has maximum car	ohydrates associated w	ith it is
(1) Alpha	(2) Beta	
(3) Kappa	(4) Gamma	
Options :		
19088949501. 1		
19088949502. 2		
19088949503. 3		
19088949504. 4		
Question Number : 22 Question Id :	19088912403 Quest	ion Type : MCQ Option Shuffling : No
Is Question Mandatory : No		
Correct Marks : 4 Wrong Marks : 1		
What is the proportion in which buffalo milk are to be combined in order to produce mixe standards?		
(1) 1:1	2) 2:1	

(4) 1:3

1:2

(3)

Options:

19088949505.1

19088949506.2

19088949507.3

19088949508.4

Question Number: 23 Question Id: 19088912404 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

The environmental management of a dairy plant is denoted by the ISO series ______.

(1) 9000

(2) 11000

(3) 14000

(4) 22000

Options:

19088949509.1

19088949510.2

19088949511.3

19088949512.4

Question Number: 24 Question Id: 19088912405 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Correct Marks: 4 Wrong Marks: 1

Match List I with List II

	List I		List II
(A)	Fat in infant food	(I)	10%
(B)	Fat in table cream	(II)	19%
(C)	Fat in condensed milk	(III)	20%
(D)	Fat in ice cream	(IV)	9%

Choose the correct answer from the options given below:

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

Options:	
19088949513. 1	
19088949514. 2	
19088949515. 3	
19088949516. 4	
Question Number : 25 Question Id : 190889	12406 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No	
Correct Marks : 4 Wrong Marks : 1	
Deficiency of calcium in the diet leads to	
(1) Goitre	(2) Anemia
(3) Osteoporosis	(4) Rickets
Options:	
19088949517. 1	
19088949518. 2	
19088949519. 3	
19088949520. 4	
Question Number : 26 Question Id : 190889	12407 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No	
Correct Marks : 4 Wrong Marks : 1	
is an example of a medical food.	
(1) Sports drinks	(2) Symbiotic yoghurt
(3) Flavoured dairy drink	(4) Lactose hydrolysed milk
Options :	
19088949521. 1	
19088949522. 2	
19088949523. 3	
19088949524. 4	

_	ion Number : 27 Question Id stion Mandatory : No	: 19088912408 (Question Type : MCQ Option Shuffling : No
	-		
	t Marks : 4 Wrong Marks : 1 Intimicrobial protein found in	milk is	
(1)	Glycomacropeptide	(2)	Lactoferrin
(3)	MGF protein	(4)	A 1200 M 10 10 10 10 10 10 10 10 10 10 10 10 10
(0)	nioi protein	(1)	p Europeanin
Option	ns:		
190889	949525. 1		
190889	949526. 2		
190889	949527. 3		
190889	949528. 4		
Questi	ion Number : 28 Question Id	· 19088912409 (Question Type : MCQ Option Shuffling : No
_	stion Mandatory : No	. 15000512105	Question Type I med option sharining I me
_	t Marks : 4 Wrong Marks : 1		
	rotein content in retentate ca	n be further inc	acreased using
(1)	Diafiltration	(2)	Nanofiltration
(3)	Microfiltration	(4)	Reverse osmosis
Option	ns:		
190889	949529. 1		
190889	949530. 2		
190889	949531.3		
190889	949532. 4		
Questi	ion Number : 29 Question Id	: 19088912410 (Question Type : MCQ Option Shuffling : No
	stion Mandatory : No		
Correc	t Marks : 4 Wrong Marks : 1		
Elimin	ation of by removing to the problem of cow milk allergy in c	07. 30.70	w milk by transgenesis may
	β-Casein	(2) Lactose	
	α-Lactalbumin	(4) β-Lactoglobu	ulin

Options:

19088949533.1

19088949534. 2

19088949535. 3

19088949536.4

Question Number: 30 Question Id: 19088912411 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): It is, in general difficult to stabilize a water in oil emulsion.

Reason (R): Charge effects are not applicable and only steric stabilization is possible in

W/O emulsions.

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

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

Options:

19088949537. 1

19088949538. 2

19088949539. 3

19088949540.4

Question Number: 31 Question Id: 19088912412 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Which	h among the following is an example o	f spark	ling wine?
(1)	Port Wine	(2)	Sherry
(3)	Champagne	(4)	Red wine
Optio	ns:		
19088	949541.1		
19088	949542. 2		
19088	949543. 3		
19088	949544. 4		
	ion Number : 32 Question Id : 190889 [.] estion Mandatory : No	12413 (Question Type : MCQ Option Shuffling : No
	ct Marks: 4 Wrong Marks: 1 mum heat damage occur during the		of dwing
(1)	Falling Rate Period	(2)	Constant Rate Period
(3)	Come-up Period	(4)	Post drying stage
Optio	ns:		
19088	949545. 1		
19088	949546. 2		
19088	949547. 3		
19088	949548. 4		
Quest	ion Number : 33 Question Id : 190889 [.]	12414 (Question Type : MCQ Option Shuffling : No
Is Que	estion Mandatory : No		
Corre	ct Marks : 4 Wrong Marks : 1		
Whic	ch among the following is absent in coo	coa but	ter?
(1)	Palmitic acid	(2)	Oleic acid
(3)	Stearic acid	(4)	Lauric acid
Optio	ns:		

19088949549.1

1908	8949551. 3				
1908	8949552. 4				
Ques	stion Number : 34 Question Id	: 1908	38912415 (Question Type : MCQ Op	tion Shuffling : No
Is Qu	estion Mandatory : No				
Corre	ect Marks : 4 Wrong Marks : 1				
Whi	ch among the following is the 1	educe	ed form of	myoglobin?	
(1)	Oxymyoglobin		(2)	Metmyoglobin	
(3)	Oxygenated myoglobin		(4)	Deoxymyoglobin	
Optio	ons :				
1908	8949553. 1				
1908	8949554. 2				
1908	8949555. 3				
1908	8949556. 4				
Ques	stion Number : 35 Question Id	: 1908	38912416 (Question Type : MCQ Op	tion Shuffling : No
Is Qu	estion Mandatory : No				
Corre	ect Marks : 4 Wrong Marks : 1				
Exter	nsive heating of starchy rich food mate	erial ma	ay lea <mark>d</mark> s to th	ne formation of	
(1)	Resistant starch	(2)	Histamine		
(3)	Acrylamide	(4)	Waxy star	eh	
Optio	ons:				
1908	8949557. 1				
1908	8949558. 2				
1908	8949559. 3				
1908	8949560. 4				
1908	8949560. 4				

19088949550. 2

Question Number : 36 Question Id : 19088912417 Question Type : MCQ Option Shuffling : No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which among the following is not a reconstitution property of milk powder?

(1) Sinkability

(2) Wettability

(3) Agglomeration

(4) Dispersibility

Options:

19088949561.1

19088949562.2

19088949563.3

19088949564.4

Question Number: 37 Question Id: 19088912418 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Match List I with List II

List I

(A) Malolactic Fermentation

(I) Bread

List II

(B) Pitching

(II) Wine

(C) Dextrinization

(III) Meat

(D) Stunning

(IV) Beer

Choose the correct answer from the options given below:

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

Options:

19088949565.1

19088949566, 2

19088949567.3

19088949568. 4

Question Number: 38 Question Id: 19088912419 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): Cake flour in often subjected to chlorination to improve the quality of cake.

Reason (R): Chlorination bleaches the carotenoids of wheat flour, and impart

whiteness. It also oxidizes flour starch which swells more on gelatinization.

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

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

Options:

19088949569.1

19088949570. 2

19088949571. 3

19088949572.4

Question Number: 39 Question Id: 19088912420 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R). Fruits like mango are exposed to Vapour Heat Treatment (VHT) before Assertion (A): export as quarantine measure. Reason (R): Exposure to vapour check the biosynthesis of ethylene and thus inhibit ripening process. In the light of the above statements, choose the correct answer from the options given below: Both (A) and (R) are true and (R) is the correct explanation of (A) (1)(2)Both (A) and (R) are true but (R) is NOT the correct explanation of (A) (A) is true but (R) is false (3)(A) is false but (R) is true (4) **Options:** 19088949573. 1 19088949574. 2 19088949575.3 19088949576. 4 Question Number: 40 Question Id: 19088912421 Question Type: MCQ Option Shuffling: No **Is Question Mandatory: No** Correct Marks: 4 Wrong Marks: 1 Food emulsions exhibits ______ type of rheological behaviour. Newtonian (1) (2) Rheopectic Shear thinning Shear thickening (4) (3)

Options:

19088949577.1

19088949578. 2

19088949579.3

19088949580.4

Question Number : 41 Question Id : 19088912422 Question Type : MCQ Option Shuffling : No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Average Magnesium (Mg) content of raw milk is about

(1) 1.2 mg/100 ml

(2) 12 mg/100 ml

(3) 120 mg/100 ml

(4) 0.12 mg/100 ml

Options:

19088949581.1

19088949582.2

19088949583.3

19088949584.4

Question Number: 42 Question Id: 19088912423 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Volumeteric method for detection of lactose in milk

(1) Lane-Eynon Method

(2) Werner-Schimdt Method

(3) Polarimetric Method

(4) Rose-Gottleib Method

Options:

19088949585.1

19088949586. 2

19088949587.3

19088949588.4

Question Number: 43 Question Id: 19088912424 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Crude protein content of milk and milk product is calculated by multiplying nitrogen content with factor

(1) 6.25

(2) 6.38

(3) 6.30

(4) 5.75

Options:

19088949589. 1 19088949590. 2 19088949591. 3

19088949592.4

Question Number: 44 Question Id: 19088912425 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Vacreation refers to

(1) Vaccum packaging (2) Vaccum sterilization

(3) Vaccum pasteurization (4) Vaccuum creation

Options:

19088949593.1

19088949594.2

19088949595.3

19088949596.4

Question Number: 45 Question Id: 19088912426 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

For selection of wavelength, spectrophotometer uses:

(1) Processor (2) Transducer

(3) Monochromator (4) Slit

Options:

19088949597.1

19088949598.2

19088949599.3

19088949600.4

Question Number: 46 Question Id: 19088912427 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Following product exhibit maximum heat induced changes

- (1) Sweetened Condensed Milk
- (2) Evaporated milk

(3) Khoa

(4) Milk Powder

Options:

19088949601.1

19088949602.2

19088949603.3

19088949604.4

 $Question\ Number: 47\ Question\ Id: 19088912428\ Question\ Type: MCQ\ Option\ Shuffling: No$

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Casein: Fat ratio is adjusted in cheese milk to

(1) 0.45 - 0.60

(2) 0.68 - 0.70

(3) 0.68 - 0.80

(4) 0.60 - 0.70

Options:

19088949605.1

19088949606. 2

19088949607.3

19088949608.4

Question Number: 48 Question Id: 19088912429 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Correct Marks: 4 Wrong Marks: 1

During cheese making enzyme rennet acts on

(1) αS_1 -Casein

(2) β-Casein

(3) αS_2 -Casein

(4) K-Casein

Options:

19088949609. 1 19088949610. 2 19088949611. 3

19088949612.4

Question Number: 49 Question Id: 19088912430 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

For which of the water soluble vitamin milk is the only source for vegetarians

(1) Folic acid

(2) Cyanocobalamin

(3) Thiamin

(4) Biotin

Options:

19088949613.1

19088949614.2

19088949615.3

19088949616.4

Question Number: 50 Question Id: 19088912431 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

As per FSSA, 2006, maximum free fatty acid content (% oleic acid) in ghee is

(1) 1.5%

(2) 3%

(3) 2.5%

(4) 3.5%

Options:

19088949617. 1

19088949618. 2

19088949619.3

19088949620.4

Question Number: 51 Question Id: 19088912432 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

The area of pipe at section XX' is 315 cm². The area of pipe at section YY' is twice the area of section XX'. The velocity at section XX' is 4.5 m/sec. Find the velocity at section YY'. Also determine flow rate through the pipe.

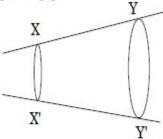


Fig. 1

- (1) $V = 2.25 \text{ m/sec}, Q = 0.14175 \text{ m}^3/\text{sec}$
- (2) $V = 22.25 \text{ m/sec}, Q = 0.14175 \text{ m}^3/\text{sec}$
- (3) $V = 2.25 \text{ m/sec}, Q = 1.4175 \text{ m}^3/\text{sec}$
- (4) $V = 22.25 \text{ m/sec}, Q = 1.4175 \text{ m}^3/\text{sec}$

Options:

19088949621.1

19088949622. 2

19088949623.3

19088949624.4

Question Number: 52 Question Id: 19088912433 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

The thermal conductivity of frozen food is ______ than foods at normal temperature.

(1) Lower

(2) Higher

(3) Same

(4) Can not predict

Options:

19088949625.1

19088949626, 2

19088949627. 3

 ${\bf Question\ Number: 53\ Question\ Id: 19088912434\ Question\ Type: MCQ\ Option\ Shuffling: None of the Control of the Contr$

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which of the following arrangement could eleminate the use of pump between effects in evaporation?

(1) Forward feed

(2) Backward feed

(3) Mixed feed

(4) Its theoretically impossible

Options:

19088949629.1

19088949630.2

19088949631.3

19088949632.4

Question Number: 54 Question Id: 19088912435 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Ingress of oxygen into the package _____.

- (1) Decrease the activities of the enzymes
- (2) Increase the activities of the enzyme
- (3) No change in the activities of the enzyme
- (4) Initially increase followed by decrease in enzyme activity

Options:

19088949633.1

19088949634.2

19088949635.3

19088949636.4

Question Number: 55 Question Id: 19088912436 Question Type: MCQ Option Shuffling: No

Is Qu	estion Mandatory : No			
Corre	ect Marks : 4 Wrong Marks : 1			
The	heating mechanism of microw	ave pr	ocessing	is
(1)	Dipole rotation		(2)	Infrared heating
(3)	Ionic polarization		(4)	Both (1) and (3)
Optio	ons :			
1908	8949637. 1			
1908	8949638. 2			
1908	8949639. 3			
1908	8949640. 4			
Ques	stion Number : 56 Question Id	: 1908	8912437 (Question Type : MCQ Option Shuffling : No
Is Qu	estion Mandatory : No			
Corre	ect Marks : 4 Wrong Marks : 1			
The	water sorption by a food is independe	ent of —	750	
(1)	Composition	(2)	Physico-c	hemical state of ingredients
(3)	Physical structure of the food	(4)	Exposure	to light
Optio	ons :			
1908	8949641.1			
1908	8949642. 2			
1908	8949643. 3			
1908	8949644. 4			
Ques	tion Number : 57 Question Id	: 1908	8912438 (Question Type : MCQ Option Shuffling : No
Is Qu	estion Mandatory : No			
Corre	ect Marks : 4 Wrong Marks : 1			
In sh	nell and tube heat exchange the tube, w	v <mark>hich</mark> car	ry milk thro	ough it, should be made up of
(1)	Aluminium	(2)	Copper	
(3)	Stainless Steel	(4)	Iron	

Options: 19088949645.1 19088949646.2 19088949647.3 19088949648.4 Question Number: 58 Question Id: 19088912439 Question Type: MCQ Option Shuffling: No **Is Question Mandatory: No** Correct Marks: 4 Wrong Marks: 1 The HTST process involves heating milk to 62°C for 30 min (2) 72°C for 15 sec (1) 65°C for 15 min (4) 100°C for < 1 sec (3) **Options:** 19088949649.1 19088949650. 2 19088949651.3 19088949652.4 Question Number: 59 Question Id: 19088912440 Question Type: MCQ Option Shuffling: No **Is Question Mandatory: No** Correct Marks: 4 Wrong Marks: 1 Which of the following is known as heart of the vapour compression refrigeration system? Condenser (1) (2)Evaporator Receiver (3)(4) Compressor **Options:** 19088949653.1 19088949654. 2 19088949655.3 19088949656, 4

Question Number: 60 Question Id: 19088912441 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

What is the full form of PLC?

(1) Programmable Logo Control (2) Preventable Logic Control

(3) Programmable Logic Control (4) Processed Linear Control

Options:

19088949657.1

19088949658. 2

19088949659.3

19088949660.4

Question Number: 61 Question Id: 19088912442 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Two agreement which are coming into force after Uruguay sound of multilateral Trade Negotiations are

- (A) TBT and SPS
- (B) TRIPS and SPS
- (C) GATT and WTO
- (D) TBT and GATT

Choose the most appropriate answer from the options given below:

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

Options:

19088949661.1

19088949662.2

19088949663.3

Question Number: 62 Question Id: 19088912443 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

A failure to meet quality requirement is known as

- (A) Conformity
- (B) Observation
- (C) Non-conformity
- (D) Unsatisfactory

Choose the most appropriate answer from the options given below:

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

Options:

19088949665.1

19088949666. 2

19088949667.3

19088949668.4

Question Number: 63 Question Id: 19088912444 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Faecal Indicator of milk is

(1) Coliforms

(2) Escherichia coli

(3) Salmonella

(4) Enterococcus faecalis

Options:

19088949669.1

19088949670.2

19088949671.3

Question Number: 64 Question Id: 19088912445 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Father of Medical Microbiology

(1) Louis Pasteur

(2) Joseph Lister

(3) Robert Koch

(4) Anton Von Leewanhook

Options:

19088949673.1

19088949674.2

19088949675.3

19088949676.4

Question Number: 65 Question Id: 19088912446 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

ISO Standard for Food Safety is

(1) ISO 9001

(2) ISO 22000

(3) ISO 14001

(4) ISO 17025

Options:

19088949677.1

19088949678.2

19088949679.3

19088949680.4

Question Number: 66 Question Id: 19088912447 Question Type: MCQ Option Shuffling: No

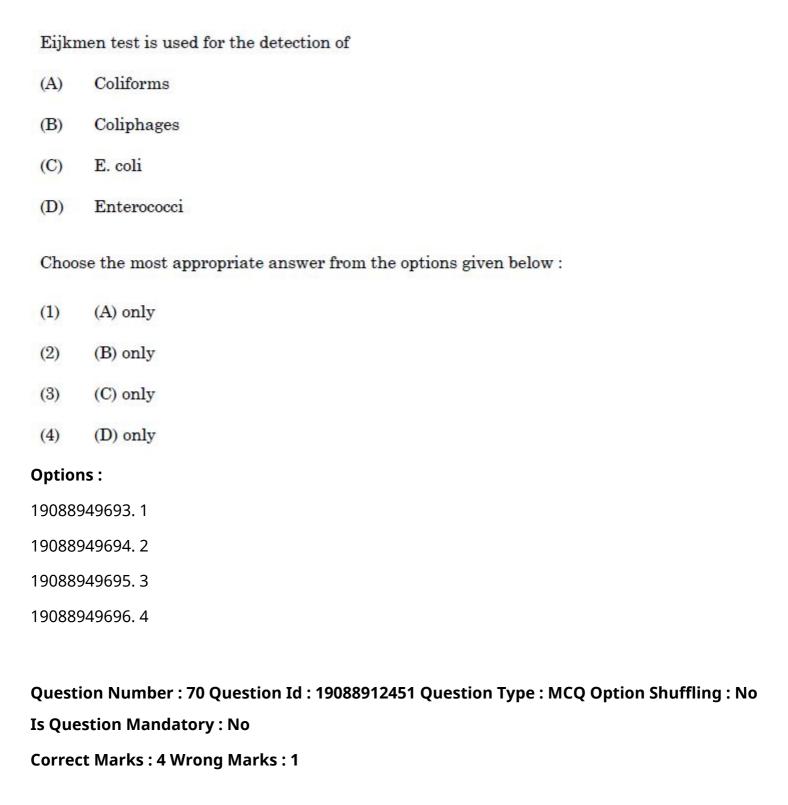
Is Question Mandatory: No

Com	mon activity test used for starter culture
(A)	Microscopic examination
(B)	Horrel Elliker test
(C)	Morphological examination
(D)	Growth on medium
Choo	se the most appropriate answer from the options given below :
(1)	(A) only
(2)	(B) only
(3)	(C) only
(4)	(D) only
Option	ns:
190889	949681. 1
190889	949682. 2
190889	949683. 3
190889	949684. 4
Quest	ion Number : 67 Question Id : 19088912448 Question Type : MCQ Option Shuffling : No
	estion Mandatory : No
Correc	ct Marks : 4 Wrong Marks : 1
Fath	ner of Biosensor is
(A)	Leoland C Clark
(B)	Leoland F Clark
(C)	Biacore
(D)	Ferland
Choo	ose the most appropriate answer from the options given below:
(1)	(A) only
(2)	(B) only
(3)	(C) only
(4)	(D) only

Options	5:
1908894	19685. 1
1908894	19686. 2
1908894	19687. 3
1908894	19688. 4
Questio	on Number : 68 Question Id : 19088912449 Question Type : MCQ Option Shuffling : No
Is Ques	tion Mandatory : No
Correct	Marks : 4 Wrong Marks : 1
Which	of the diseases are caused by Coxiella burnetii?
(A)	Tuberculosis
(B)	Brucellosis
(C)	'Q' fever
(D)	Malta fever
Choose	e the most appropriate answer from the options given below
(1)	(A) only
(2)	(B) only
(3)	(C) only
(4)	(D) only
Options	5:
1908894	19689. 1
1908894	19690. 2
1908894	19691. 3
1908894	19692. 4
Questio	on Number : 69 Question Id : 19088912450 Question Type : MCQ Option Shuffling : No

Correct Marks : 4 Wrong Marks : 1

Is Question Mandatory : No



Patho	ogenic bacteria major concern in sweetened	condensed milk
(A)	E. coli	
(B)	<u>Listeria monocytogenes</u>	
(C)	Staphylococcus aureus	
(D)	Campylobacter jejuni	
Choose the most appropriate answer from the options given below:		
(1)	(A) only	
(2)	(B) only	
(3)	(C) only	
(4)	(D) only	
Option	s:	
19088949697. 1		
19088949698. 2		
190889	49699. 3	
190889	49700. 4	
Part C : Food Technology		
	Part C : Food T	echnology
Section		echnology 190889253
	ı Id : Number :	190889253
Section Section	ı Id : Number :	190889253
Section Section Manda	ı Id : n Number : n type :	190889253 3 Online
Section Section Manda Number	i Id : i Number : i type : tory or Optional :	190889253 3 Online Mandatory
Section Section Manda Number	Id: Number: type: tory or Optional: or of Questions:	190889253 3 Online Mandatory 50
Section Section Manda Numbe Numbe	Id: Number: type: tory or Optional: or of Questions:	190889253 3 Online Mandatory 50 50 200
Section Section Manda Numbe Numbe Section Enable	Id: Number: type: tory or Optional: or of Questions: or of Questions to be attempted: Marks:	190889253 3 Online Mandatory 50 50
Section Section Manda Numbe Numbe Section Enable Clear R	Id: Number: type: tory or Optional: or of Questions: or of Questions to be attempted: Marks: Mark as Answered Mark for Review and	190889253 3 Online Mandatory 50 50 200
Section Section Manda Numbe Numbe Section Enable Clear R Sub-Sec	Id: Number: type: tory or Optional: er of Questions: er of Questions to be attempted: Marks: Mark as Answered Mark for Review and esponse:	190889253 3 Online Mandatory 50 50 200 Yes
Section Section Manda Numbe Numbe Section Enable Clear R Sub-Sec	Id: Number: type: tory or Optional: or of Questions: or of Questions to be attempted: Marks: Mark as Answered Mark for Review and esponse: ction Number:	190889253 3 Online Mandatory 50 50 200 Yes

Question Number: 71 Question Id: 19088912452 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Natural antimicrobial substance permitted under regulations in food products is

(1) Lysozyme

(2) Nisin

(3) Natamycin

(4) Lactoferrin

Options:

19088949701.1

19088949702. 2

19088949703.3

19088949704.4

Question Number: 72 Question Id: 19088912453 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Microbial group which may grow in Saurkraut at acidity above 1 percent lactic acid

(1) Leuconostoc mesenteroides

(2) Lactobacillus plantarum

(3) Pediococcus species

(4) Lactobacillus brevis

Options:

19088949705.1

19088949706. 2

19088949707.3

19088949708.4

Question Number: 73 Question Id: 19088912454 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Barley grains are preferred for malting purpose because ______

- (1) Barley is not popular as staple food
- (2) Barley contain β-glucan, known for anti-cholesterolemic role
- (3) Barley grain has unique diversity of hydrolytic enzymes
- (4) Barley grain on roasting/kilning develop pleasant aroma

Options:

19088949709.1

19088949710.2

19088949711.3

19088949712.4

Question Number: 74 Question Id: 19088912455 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Modified Atmospheric Storage (MAS) inhibits the ripening of fruits and vegetables. Which among the following phenomenon is the most likely be explanation for the same?

- (1) Lowering of temperature minimizes the rate of respiration during MAS
- (2) High CO₂ level and subsequent lowering of O₂ concentration reduces the activity of ACC oxidase
- (3) High CO₂ check the growth of microorganisms
- (4) MAS inactivates the cell wall hydrolytic enzymes leading to slow release of ethylene

Options:

19088949713. 1

19088949714. 2

19088949715.3

19088949716.4

Question Number: 75 Question Id: 19088912456 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Pale, Soft and Exudative (PSE) meat is characterized by abnormal light colour, soft texture and poor water holding capacity. Which among the following may be considered as responsible for PSE meat?

- (1) Inadequate pre-slaughter rest
- (2) Rapid chilling of carcass
- (3) Animal is not fed properly resulting in high ultimate pH of meat
- (4) Carcass is chilled slowly leading to higher meat temperature

Options:

19088949717.1

19088949718. 2

19088949719.3

19088949720.4

Question Number: 76 Question Id: 19088912457 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Which among the following will not impart red colour in food products?

(1) Carmosine

(2) Ponceau 4R

(3) Tartrazine

(4) Erythrosine

Options:

19088949721.1

19088949722. 2

19088949723.3

19088949724.4

Question Number: 77 Question Id: 19088912458 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

- (A) Pectin is commercially obtained from Apple Pomace and Citrus waste.
- (B) Functional properties of pectin depends on degree of esterification.
- (C) High methoxyl pectin requires divalent cations for gel formation.
- (D) Low methoxyl pectin is used in dietetic Jelly.
- (E) Beetroot pectin forms poor gel due to high acetyl content.

Choose the correct answer from the options given below:

- (1) Statement (B) and (C) are wrong
- (2) Only Statement (A) is correct
- (3) Statement (A), (B), (D) and (E) are correct
- (4) Statement (B) is correct explanation of (C)

Options:

19088949725.1

19088949726. 2

19088949727.3

19088949728.4

Question Number: 78 Question Id: 19088912459 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Given below are two statements:

Statement I: Campylobacter Jejani is gram-negative, non-sporulating with curved or

spiral-shaped cells that exhibit a characteristic rapid, reciprocating motility. It may cause food borne illness through consumption of foods of

animal origin.

Statement II: E.coli O157: H7 belongs to Enterohemorrhagic E.coli group and produce

shiga toxin.

In the 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 true but Statement II is false
- (4) Statement I is false but Statement II is true

Options:

19088949729.1

19088949730. 2

19088949731.3

19088949732.4

Question Number: 79 Question Id: 19088912460 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Given be	low are two statements:									
Stateme	atement I: Glucose syrups with higher Dextrose Equivalent (DE) values can be produced by the activity of α -amylases.									
Stateme	nt II: High Fructose Corn Syrup (HFCS) production on commercial scale depends on the application of Glucose Isomerase Enzyme.									
In the l	ght of the above statements, choose the correct answer from the options given									
(1) H	oth Statement I and Statement II are true									
(2) I	oth Statement I and Statement II are false									
(3)	tatement I is true but Statement II is false									
(4)	tatement I is false but Statement II is true									
Option	5:									
190889	19733. 1									
190889	19734. 2									
190889	19735. 3									
190889	19736. 4									
Questi	on Number : 80 Question Id : 19088912461 Question Type : MCQ Option Shuffling : No									
Is Ques	tion Mandatory : No									
Correct	Marks: 4 Wrong Marks: 1									

Shape Index of round egg is ______.

(1) 56 (2) > 72

(3) 45 (4) 86

Options:

19088949737.1

19088949738. 2

19088949739.3

Question Number : 81 Questi	on Id : 190)88912462 C	uestion Type : MCQ	Option Shuffling : No
Is Question Mandatory : No				
Correct Marks : 4 Wrong Mar	ks : 1			
Scalding of pig is done at	0	C for	seconds.	
(1) 60°C for 360 sec		(2)	$60^{\circ}\mathrm{C}$ for $300~\mathrm{sec}$	
(3) 65° C for 360 sec		(4)	$45^{\circ}\mathrm{C}$ for 360 sec	
Options :				
19088949741.1				
19088949742. 2				
19088949743. 3				
19088949744. 4				
Question Number : 82 Questi	on Id : 190)88912463 C	Question Type : MCQ	Option Shuffling : No
Is Question Mandatory : No				
Correct Marks : 4 Wrong Mar	ks : 1			
Crude vegetable oil is kept at low t	emperature	to remove	and the process i	S
termed as				
(1) Phospholipids and Degummin	g (2)	Plant pigmen	ts and Bleaching	
(3) Off-Flavour and Stripping	(4)	Waxes and W	interization	
Options :				
19088949745. 1				
19088949746. 2				
19088949747. 3				
19088949748. 4				
Question Number : 83 Questi	on Id : 190)88912464 C	Question Type : MCO	Option Shufflina: No

Is Question Mandatory : No

During rice milling the percentage of broken grains was very high. The plant manager explained the following reasons for the same.

Statement I: Moisture gradient was high between the centre of the grain and on the

surface.

Statement II: Disc sheller was used in place of rubber roller sheller.

In the 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 but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Options:

19088949749.1

19088949750.2

19088949751.3

19088949752.4

Question Number: 84 Question Id: 19088912465 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Match List I with List II

List II

- (A) High Pressure Processing (HPP) (I) Electroporation
- (B) Pulsed Electric Field (PEF) (II) Le Chatlier's Principle
- (C) Microwave Processing (MW) (III) Electrical Resistance
- (D) Ohmic Heating (OH) (IV) Dipole Movement

Choose the correct answer from the options given below:

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

Options:

1908	8949753. 1				
1908	8949754. 2				
1908	8949755. 3				
1908	8949756. 4				
Is Qι	stion Number : 85 Question Id : uestion Mandatory : No ect Marks : 4 Wrong Marks : 1	: 190)88912466 	Question Type : MC	Q Option Shuffling : No
Max	simum permissible limit of Benzo	ic ac	id in Toma	ato paste is	<u>e</u> vi
(1)	100 ppm		(2)	250 ppm	
(3)	500 ppm		(4)	750 ppm	
Opti	ons:				
1908	8949757. 1				
1908	8949758. 2				
1908	8949759. 3				
1908	8949760. 4				
_	stion Number : 86 Question Id : uestion Mandatory : No	190	88912467	Question Type : MC	Q Option Shuffling : No
Corr	ect Marks : 4 Wrong Marks : 1				
	ponent that is responsible for brightness	s, bris	skness and b	right red colour of tea infu	sion
(1)	Gallocatechin	(2)	Thearubigi	in	
(3)	Theaflavin	(4)	Caffeine		
Opti	ons:				
1908	8949761. 1				
1908	8949762. 2				
1908	8949763. 3				
1908	8949764. 4				

Question Number: 87 Question Id: 19088912468 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Given below are four statements:

- (A) Palm oil is extracted from the mesocarp fraction of oil palm.
- (B) Palm oil has a tendency to form β' (Beta Prime) crystals, hence considered an ideal base material for bakery shortening.
- (C) Revested flavour of palm oil is pleasant.
- (D) Crude palm oil contains lycopene pigments.

Choose the most appropriate answer from the options given below:

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

Options:

19088949765.1

19088949766.2

19088949767.3

19088949768.4

Question Number: 88 Question Id: 19088912469 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Match List I with List II

List I

List II

(A) Calcium Propionate

(I) Cake flour

(B) Chlorine gas

(II) Rope inhibitor

(C) Benzoyl peroxide

- (III) Bleaching and oxidizing agent
- (D) Ammonium bicarbonate
- (IV) Biscuits

Choose the correct answer from the options given below:

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

Options:

19088949769.1

19088949770.2

19088949771.3

19088949772.4

Question Number: 89 Question Id: 19088912470 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Extrusion processing is a versatile technology that is applied for the production of wide range of innovative food products. Which among the following do not occur during extrusion processing?

- (A) Plasicization of dough component.
- (B) Gelatinization of starch and protein denaturation.
- (C) Hydrolysis of cell wall polysaccharides.
- (D) Expansion of extruded products.

Choose the most appropriate answer from the options given below:

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

Options:

19088949773.1

19088949774. 2

19088949775.3

19088949776.4

Question Number: 90 Question Id: 19088912471 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

"Mill	and Dairy Products are considered as nature's perfect functional foods because
(A)	They contain all macro and micro-nutrients except iron, vitamin C and dietary fiber.
(B)	Fermented dairy products are excellent source of beneficial bacteria.
(C)	Milk proteins upon digestion release bioactive peptides.
(D)	Milk has a unique balance of omega (ω) fatty acids.
Choo	se the most appropriate answer from the options given below:
(1)	(B) and (C) only
(2)	(A) only
(3)	(B) only
(4)	(D) only
Opti	ons:
1908	8949777. 1
1908	8949778. 2
1908	8949779. 3
1908	8949780. 4
	stion Number : 91 Question Id : 19088912472 Question Type : MCQ Option Shuffling : No
	uestion Mandatory : No
Corr	ect Marks : 4 Wrong Marks : 1
High	ner damaged starch content in bread flour may results in
(1)	Enhanced flavour of bread
(2)	More open cell structure and greying of bread colour
(3)	Higher dextrin formation leading to rapid retrogradation
(4)	Poor water absorption of water during Kneading resulting in hard crust
Opti	ons:
1908	8949781. 1
1908	8949782. 2
1908	8949783. 3
1908	8949784. 4

Que	stion Number : 92 Question Id	: 19	08	8912473 Question Type : MCQ Option Shuffling : No
Is Q	uestion Mandatory : No			
Corr	ect Marks : 4 Wrong Marks : 1			
prop	erties. The TPA curve provided the in	nform	ati	applied to measure the various textural on regarding the degree to which the er partial compression. This feature is
(1)	Cohesiveness	(2)	R	Cesilience
(3)	Springiness	(4)	В	Sounce
Opti	ons:			
1908	88949785. 1			
1908	38949786. 2			
1908	38949787. 3			
1908	88949788. 4			
Que	stion Number : 93 Question Id	: 19	08	8912474 Question Type : MCQ Option Shuffling : No
Is Q	uestion Mandatory : No			
Corr	ect Marks : 4 Wrong Marks : 1			
BET	model of sorption isotherm are best f	it in t	the	water activity range of
(1)	Less than 0.5	(2)	0.6 - 0.7
(3)	0.8 – 1.0	(4)	All water activity range i.e. $0.1 - 1.0$
Opti	ons:			
1908	38949789. 1			
1908	38949790. 2			
1908	38949791. 3			
1908	88949792. 4			

Question Number : 94 Question Id : 19088912475 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Which among the following is not a limitation of Plank's equation for prediction of freezing time of a food material?

- (1) It cannot be used for the products other than spherical in shpae
- (2) Concern is selection of latent heat magnitude
- (3) Selection of an appropriate value for the thermal conductivity
- (4) Does not account for the time required for the removal of sensible heat from unfrozen product above the initial freezing temperature

Options:

19088949793.1

19088949794.2

19088949795.3

19088949796.4

Question Number: 95 Question Id: 19088912476 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Sweet nutty flavour of heat dessicated dairy products is attributed to the formation of

(1) Lactulose

(2) Maltol

(3) δ -Lactone

(4) Ethyl acetate

Options:

19088949797.1

19088949798. 2

19088949799.3

19088949800.4

Question Number: 96 Question Id: 19088912477 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Whic	h among the following has maj	jor influence or	n the concentration of natural antioxidants
in cel	lls?		
(1)	Lysine	(2)	Methionine
(3)	Phenylalanine	(4)	Cysteine
Opti	ons:		
1908	8949801. 1		
1908	8949802. 2		
1908	8949803. 3		
1908	8949804. 4		
_	N. I. 27.0	400	00040470 0 '' T NGO 0 '' GI (KI' N
_	_	tion 1a : 190	88912478 Question Type : MCQ Option Shuffling : No
	uestion Mandatory : No		
Corr	ect Marks : 4 Wrong Ma	rks:1	
Fishy	taint in butter is attributed to	the	_
(1)	FFA formation owing to lipol	lytic activity of	Pseudomonas spp.
(2)	Formation of ovaleric acid du	uring the prote	olysis by coliforms
(3)	Formation of 3-methyl butan	nol due to grow	th of Streptococcus lactis
(4)	Formation of Trimethyl an candidum	nine from the	Lecithin by the activity of Geotrichum
Opti	ons :		
1908	8949805. 1		
1908	8949806. 2		

19088949807.3

19088949808.4

Question Number: 98 Question Id: 19088912479 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

	ified milk beverages or Yoghurt drinks are stabilized during thermal treatment by the tions of
(1)	Stabilizing salts such as phosphate or citrate
(2)	High viscosity type Xanthan gum
(3)	High methoxyl pectin
(4)	Calcium salts
Opti	ons:
1908	38949809. 1
1908	38949810. 2
1908	38949811. 3
1908	88949812. 4
Oue	stion Number : 99 Question Id : 19088912480 Question Type : MCQ Option Shuffling : No
	uestion Mandatory : No
	ect Marks : 4 Wrong Marks : 1
	ch statement(s) is correct in reference to cheese making?
(A)	Pasteurization of cheese milk normally increases the Rennet Coagulation Time (RCT).
(B)	Casein precipitation is a single step process.
(C)	Ripening of cheese is characterized by the hydrolysis of proteins only.
(D)	Glycomacropeptide (GMP) formation occurs during renneting process.
Choo	ose the most appropriate answer from the options given below:
(1)	(A) and (C) only
(2)	(B) and (C) only
(3)	(A) and (D) only
(4)	(B) and (D) only
Opti	ons:
1908	88949813. 1
1908	88949814. 2

19088949815.3

Question Number: 100 Question Id: 19088912481 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Pesticide group that exhibits maximum half-life in environment ______.

(1) Organophosphate

(2) Carbamates

(3) Organochloro

(4) Pyrethroids

Options:

19088949817.1

19088949818.2

19088949819.3

19088949820.4

Question Number: 101 Question Id: 19088912482 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Given below are two statements with reference to zero order reactions

Statement I: The reaction rate is independent of the concentration of reactants.

Statement II: Many catalyzed reactions fall in the category of zero-order reactions with

respect to reactants.

In the 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 but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Options:

19088949821.1

19088949822. 2

19088949823.3

Ques	stion Number : 102 Quest	tion Id : 190	88912483 Question Type : MCQ Option Shuffling : No
	uestion Mandatory : No		
Corr	ect Marks : 4 Wrong Marl	ks : 1	
	the potential difference across are formed in the bacterial cell		nes a critical level of about
(1)	10 eV	(2) 5	0 eV
(3)	100 mV	(4) 1	·V
Opti	ons:		
1908	8949825. 1		
1908	8949826. 2		
1908	8949827. 3		
1908	8949828. 4		
Ques	stion Number : 103 Quest	tion Id : 190	88912484 Question Type : MCQ Option Shuffling : No
Is Qι	uestion Mandatory : No		
Corr	ect Marks : 4 Wrong Marl	ks : 1	
Wh	ich effect predominates during t	the ionizing rac	diation of food using low energy of rays?
(1)	Pair production	(2)	Crompton Effect
(3)	Photoelectric Effect	(4)	Direct Effect
Opti	ons:		
1908	8949829. 1		
1908	8949830. 2		
1908	8949831. 3		
1908	8949832. 4		

Question Number: 104 Question Id: 19088912485 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Match List I with List II

List I

lst I

(A) Bacterial growth inhibition

(I) At $a_w = 0.65$

List II

(B) Xerophilic Fungi Growth

(II) Below $a_w 0.15$

(C) Enzymatic activity inhibition

(III) Below a_w 0.90

(D) Toxin production

(IV) At $a_m = 1.0$

Choose the correct answer from the options given below:

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

Options:

19088949833.1

19088949834.2

19088949835.3

19088949836.4

Question Number: 105 Question Id: 19088912486 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Tenderization of meat in past-rigor stage is due to the action of ______.

(1) Papain

(2) Pepsin

(3) Cathepsin

(4) Alkaline phosphtase

Options:

19088949837.1

19088949838.2

19088949839.3

19088949840.4

Question Number: 106 Question Id: 19088912487 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Correct Marks: 4 Wrong Marks: 1

Which among the following is not a criterion used for designing of grain cleaning equipments?

- (1) Roughness of surface
- (2) Magnetic properties
- (3) Aerodynamic properties
- (4) Thermal properties

Options:

19088949841.1

19088949842. 2

19088949843.3

19088949844.4

Question Number: 107 Question Id: 19088912488 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Type of molecular linkage that is not affected by HHP Treatment is ______.

(1) Ionic Interactions

(2) Hydrophobic bonds

(3) Covalent bonds

(4) Hydrogen bonds

Options:

19088949845.1

19088949846. 2

19088949847.3

19088949848.4

Question Number: 108 Question Id: 19088912489 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Among the given below statements, which are correct for Intermediate Moisture Foods (IMF)

- (A) IMF usually contain moisture content in the range of 15-50% and water activity between 0.60 and 0.85.
- (B) Water activity of processed food products can be lowered by the addition of sugar, salts and humectants.
- (C) Growth of Staphylococcus aureus and toxin production in IMF is major public health concern.
- (D) IMF are shelf-stable at room temperature and do not require any preservative.

Choose the most appropriate answer from the options given below:

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

Options:

19088949849.1

19088949850.2

19088949851.3

19088949852.4

Question Number: 109 Question Id: 19088912490 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Fruity creamy aroma of peach is due to the presence of ______.

- (1) 2, 3, 5 Trimethyl thiazole
- (2) γ Decalactone

(3) Acetal

(4) Ethyl butyrate

Options:

19088949853.1

19088949854. 2

19088949855.3

19088949856.4

Question Number: 110 Question Id: 19088912491 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No Correct Marks: 4 Wrong Marks: 1 Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R). Assertion (A): Papaya is one of richest source of pectin, carotenoids and dietary fibers, but has never found suitable for the preparation of Jam, Jelly or Commercial Pectin extraction. Reason (R): Papaya contains low methoxyl pectin which donot form gel as in case of high methoxyl pectin. In the light of the above statements, choose the correct answer from the options given below:

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

Options:

19088949857.1

19088949858. 2

19088949859.3

19088949860.4

Question Number: 111 Question Id: 19088912492 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks : 4 Wrong Marks : 1

Recombinant chymosin	is	produced	by	genetic	engineering	of	an	d	used	ir
manufactur	e.									

- (1) Escherichia coli and cheese
- (2) Pichia pastoris and Sausages
- (3) Kluveromyces lactis and Yoghurt
- (4) Saccharomyces cerevisiae and Wine

Options:

19088949861.1

19088949862.2

19088949863.3

Que	stion Number : 112 Ques	stion Id : 19	9088912493 Question Type : MCQ Option Shuffling : No
Is Q	uestion Mandatory : No		
Corr	ect Marks : 4 Wrong Mar	′ks : 1	
	ication of wood smoke besides t. Indicate the major class of pre-	77.7.123	he palatability, enhances the shelf-life of sent in smoke
(1)	Wood alcohol	(2)	Carbonyl compound
(3)	Phenols	(4)	Formic acid
Opti	ons:		
1908	88949865. 1		
1908	38949866. 2		
1908	38949867. 3		
1908	88949868. 4		
Que	stion Number : 113 Ques	stion Id : 19	9088912494 Question Type : MCQ Option Shuffling : No
Is Q	uestion Mandatory : No		
Corr	ect Marks : 4 Wrong Mar	′ks : 1	
Freq heat		ting of food a	are if compared to microwave
(1)	Similar to MW	(2)	Lower than MW
(3)	Higher than MW	(4)	Two times more than MW
Opti	ons:		
1908	88949869. 1		
1908	88949870. 2		
1908	88949871.3		
1908	38949872. 4		

Question Number: 114 Question Id: 19088912495 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Effic	iency of a cyclone separator ca	n be improved	by increasing the	
(1)	Height of cyclone	(2)	Diameter of exit duct	
(3)	Diameter of cyclone	(4)	Velocity of Inlet air	
Opti	ons:			
1908	8949873. 1			
1908	8949874. 2			
1908	8949875. 3			
1908	8949876. 4			
Que	stion Number : 115 Quest	ion Id : 1908	8912496 Question Type : MCQ Option Shuffling : N	0
Is Qu	uestion Mandatory : No			
Corr	ect Marks : 4 Wrong Mark	s:1		
Ter	nperature of carcass chillin	ng room in ab	pattoir should be	
(1)	Below 0°C		(2) 7°C	
(3)	10°C		(4) 12-15°C	
Opti	ons:			
1908	8949877. 1			
1908	8949878. 2			
1908	8949879. 3			
1908	8949880. 4			
Que	stion Number : 116 Quest	ion Id : 1908	8912497 Question Type : MCQ Option Shuffling : N	0
Is Qu	uestion Mandatory : No			
Corr	ect Marks : 4 Wrong Mark	ks : 1		
It is	the last step in the flow of	food where a f	food safety hazard can be Prevented,	
Elim	inated, or Reduced to an acceptab	ole level		
(1)	Hazard Identification	(2) Go	ood Handling Practices (GHP)	
(3)	Critical Control Point	(4) Es	stablish corrective action	
Opti	ons:			

19088949881.1

19088949882. 2

19088949883.3

19088949884. 4

Question Number: 117 Question Id: 19088912498 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Correct Marks: 4 Wrong Marks: 1

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): Vegetables including potato, onion, garlic, ginger etc. are held at a particular temperature and relative humidity. Post-harvest management practice is termed as "Curing".

Reason (R): In curing, the cells which are lost during harvesting and subsequent handling are replenished in the form of periderm. It protect their spoilage and infestation. It is a type of wound healing process.

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

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

Options:

19088949885.1

19088949886. 2

19088949887.3

Question Number: 118 Question Id: 19088912499 Question Type: MCQ Option Shuffling: No

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Match List I with List II

List I

List II

(A) Olfactory

(I) Taste profile

(B) Gustatory

(II) Sound waves

(C) Somesthetic

(III) Aroma compounds

(D) Auditory

(IV) Mechanical pressure

Choose the correct answer from the options given below:

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

Options:

19088949889.1

19088949890.2

19088949891.3

19088949892.4

Question Number: 119 Question Id: 19088912500 Question Type: MCQ Option Shuffling: No

Is Question Mandatory : No

Which set of statements are true for six sigma concept?

- (A) Six sigma is an approach to determine and get rid of the root causes of errors and defects in both business and manufacturing process.
- (B) Major focus of six sigma is on analyzing the existing system, improving and controlling it.
- (C) Six sigma concept is versatile and may be applied to all the industries.
- (D) Six sigma pay little attention on cost cutting and waste minimization.

Choose the most appropriate answer from the options given below:

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

Options:

19088949893.1

19088949894. 2

19088949895.3

19088949896.4

 ${\bf Question\ Number: 120\ Question\ Id: 19088912501\ Question\ Type: MCQ\ Option\ Shuffling: None of the Control of the Cont$

Is Question Mandatory: No

Correct Marks: 4 Wrong Marks: 1

Technique which is not used only for the identification of flavouring compounds in food products

- (1) Mass Spectrometry
- (2) Gas Chromatography Retention Indices
- (3) Fourier Transform Infrared Spectroscopy
- (4) Charm Analysis

Options:

19088949897.1

19088949898.2

19088949899.3