PREVIEW QUESTION BANK

Module Name : FOOD SCIENCE TECHNOLOGY-ENG
Exam Date : 29-Jun-2024 Batch : 10:00-12:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	180001	What is the typical bond angle between hydrogen and oxygen atoms in a water molecule? 1. 90° 2. 104.5° 3. 120° 4. 180° A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	180002	Which conditions are favorable for the formation of acrylamide in foods? 1. High moisture and low temperature 2. Low moisture and high temperature 3. High moisture and high temperature 4. Low moisture and low temperature A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	180003		4.0	1.00

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

List-I **Chemical Compound**	**List-II** **Source**
(A).Inulin	(I). Acacia tree
(B).Sodium Alginate	(II).Red algae
(C).Gum arabica	(III).Chicory root
(D).Carrageenan	(IV).Brown algae

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

4	180004	Arrange the following HACCP principles in the correct sequence as per their implementation: (A).Conduct a hazard analysis (B).Establish critical control points (CCPs) (C).Establish corrective actions (D).Establish monitoring procedures (E).Establish verification procedures (F).Establish record-keeping and documentation procedures Choose the **correct** answer from the options given below: 1. (B), (C), (D), (E),(F),(A). 2. (A), (B), (C), (D),(E),(F). 3. (A), (B), (D), (C),(E),(F). 4. (B), (A), (C), (D),(E),(F). A1 : 1	4.0	1.00

		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
5	180005	Which of the following flavonoids is incorrectly grouped with its food source? (A). Naringin-Citrus (B). Quercetin-Onion (C). Kaempferol-Broccoli (D). Genistein-Berries Choose the ***correct*** answer from the options given below: 1. (B) and (D) only. 2. (C) and (B) only. 3. (A) and (D) only. 4. (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
6	180006	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Cereals are consumed with pulses to improve the protein quality due to mutual supplementation. Reason (R) : Cereals are deficient in lysine and rich in methionine, while pulses are deficient in methionine and rich in lysine. In light of the above statements, choose the *most appropriate* answer from the options given below . 1. Both (A) and (R) are correct 2. Both (A) and (R) are incorrect 3. (A) is correct but (R) is incorrect 4. (A) is incorrect but (R) is correct A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
7	180007	Given below are two statements: Statement (I): Trypsinogen is produced by the pancreas which acts as a digestive enzyme. Statement (II): Trypsinogen when converted to trypsin by enterokinase, helps in the digestion of fats. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
8	180008	HACCP principles were introduced by which of the following organizations? 1. Indian Organization of Standardization 2. Codex Alimentarius Commission 3. World Health Organisation 4. Indian Standard Institute A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
9	180009	How does nitrite curing helps in meat preservation? 1. It promotes the growth of *Clostridium* and *Streptococcus* bacteria 2. It raises the temperature needed to kill *C. botulinum* 3. It hinders the growth of *Clostridium* and *Streptococcus* bacteria while reducing the temperature required to kill *C. botulinum* 4. It does not influence bacterial growth or the temperature needed to eliminate pathogens A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

10 | 180010 | 4.0 | 1.00

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

List-I **Food Product**	**List-II** **Type of Colloid**
(A). Curd	(I). Solution
(B). Butter	(II). Foam
(C). Vegetable soup	(III). Gel
(D). Whipped egg white	(IV). Water in oil emulsion

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

11 | 180011 | 4.0 | 1.00

		Which of the following statements are correct in respect to pyridoxine (vitamin B6)? (A). Pyridoxine is found in cells in the active form as pyridoxal phosphate (PLP) (B). Act as a coenzyme in various metabolic reactions involving carbohydrates, fats, and proteins (C). Pyrodoxine is unstable in acidic medium and relatively stable in alkaline medium (D). Vitamin B-6 deficiency increases urinary oxalate formation Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (C) and (D) only. 3. (A), (B), and (D) only. 4. (B), (C), and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
12	180012	Given below are two statements: Statement (I): Xanthan is commonly produced by the use of *Xanthomonas campestris* on D-glucose Statement (II): Xanthan is used in the food industry as a stabilizer, emulsifier, thickener, suspending agent, bodying, and foam enhancer In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
13	180013		4.0	1.00

		Which of the following organic acids are used as acidulants in the food industry? (A). Acetic acid, lactic acid, citric acid (B). Lactic acid, phosphoric acid, citric acid (C). Phosphoric acid, lactic acid, fumaric acid (D). Fumaric acid, succinic acid, tartaric acid Choose the ***correct*** answer from the options given below: 1. (A) and (B) only. 2. (C) and (D) only. 3. (A) and (D) only. 4. (B) and (C) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
14	180014	Given below are two statements: Statement (I): Hydrogen bonds are weak, with 100 Kcal/mole bond energy. Statement (II): Hydrogen bonds play an important part in determining physical properties, and stability of crystal structures. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Statement (I) is correct but Statement (II) is incorrect. 2. Statement (I) is incorrect but Statement (II) is correct. 3. Both Statement (I) and Statement (II) are correct. 4. Both Statement (I) and Statement (II) are incorrect. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
15	180015		4.0	1.00

Which of the following is a commonly used anti-foaming agents in the food industry?

1. Water-insoluble dimethyl polysiloxanes (silicon oils)
2. Ethylenediaminetetraacetic acid (EDTA)
3. Antioxidants
4. Gums

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

16 180016 4.0 1.00

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

List-I **Food Source**	**List-II** **Flavoring Compound**
(A). Banana	(I). Citral
(B). Lemon	(II). Allicin
(C). Almonds	(III). Isopentyl acetate
(D). Garlic	(IV). Benzaldehyde

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

17 180017 4.0 1.00

Which of the following oil seed is rich in an omega-3 fatty acid?

1. Flaxseed
2. Onion seed
3. Sunflower
4. Saff flower

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

18 180018 4.0 1.00

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

List-I **Vitamin**	**List-II** **Food Source**
(A).Vitamin A	(I).Meat and fish
(B).Vitamin C	(II).Milk
(C).Vitamin B2	(III).Citrus fruits
(D).Vitamin B12	(IV).Liver and fish oils

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

19 180019 4.0 1.00

		Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) :Fats serve as an insulator in the body. Reason (R) : It helps to prevent the rapid change in temperature and cushions organs from sudden injury. In light of the above statements, choose the *correct* answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is false but (R) is true. 4. (A) is true but (R) is false. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
20	180020	Which of the following is used as an artificial sweetener in soft drinks? 1. Glucose 2. Sucrose 3. Fructose 4. Aspartame A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
21	180021	Which acid is preferred for use in colas,root beer,and other nonfruit drinks. 1. Phosphoric acid 2. Citric acid 3. Tartaric acid 4. Malic acid A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
22	180022	The use of ---------- as a flour modifier is proposed in order to permit the extrusion of the dough ,in making uncooked pasta. 1. Ascorbic acid 2. Glyceryl monostearate 3. Monosodium glutamate 4. Benzoyl peroxide A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
23	180023	Proprietery bread made from a mixture of wheat and rye which has been allowed to sprout,kiln dried and rolled, to this is added barely malt is----------. 1. Brown bread 2. Gluten bread 3. High-fibre bread 4. Granary bread A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
24	180024	Commonly used spice at houshold level, has proved to be an effective tenderizing,antioxidant and antimicrobial agent for meat and meat product is ----------. 1. Turmeric 2. Onion 3. Ginger rhizome 4. Garlic A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
25	180025	In thermostabilization, eggs are dipped in hot water or hot oil to coagulate a thin layer of --------- around the inside of cell and thus further seal it. 1. Albumen 2. Globulin 3. Prolamin 4. Glutelin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
26	180026	In cheese making, standardization refers to adjustment of the casein/fat ratio in cheese milk to ----------. 1. 0.68-0.70 2. 0.78-0.80 3. 0.58-0.60 4. 0.48-0.50 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
27	180027		4.0	1.00

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

List-I	**List-II**
Process / Enzyme	**Product**
(A).Enzymatic browning	(I). Pineapple
(B).Non enzymatic browning	(II).Papaya
(C). Bromelin	(III). Apple
(D). Papain	(IV).Bread

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

28 180028 4.0 1.00

Select sequence of carbohydrates in decreasing units of hexoses.

(A) Starch

(B) Dextrins

(C) Glucose

(D) Sucrose

Choose the correct answer from the options given below :

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

A1 : 1

A2 : 2

A3 : 3

		A4 : 4		
Objective Question				
29	180029	In stability of fats and oils thio-barbituric acid test is used to test----------. 1. Reversion 2. Rendering 3. Refining 4. Rancidity A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
30	180030	Strains of *Aspergillus niger* are carefully selected for the positive characteristics of ------- yield. 1. Fumaric acid 2. Citric acid 3. Itaconic acid 4. Kojic acid A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
31	180031	-------- is a term used to label foods treated with low-level ionizing radiations. 1. Nanowaved 2. Megawaved 3. Microwaved 4. Picowaved A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
32	180032	Heat sensitive liquid foods are commonly concentrated at low temperature in----------. 1. Vacuum evaporators 2. Film evaporators 3. Kettle evaporators 4. Flash evaporators A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
33	180033	---------- is a spanish wine, matured at high temperature by placing the filled barrels for 3 to 4 months. 1. Sherry 2. Tokay 3. Port 4. Muscat A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
34	180034		4.0	1.00

Match the correct pair of low temperature separation mostly used in dairy industry.

List-I	List-II
Process	**Application**
(A).Ultrafiltration and reverse osmosis	(I). Skim milk
(B).Ultrafiltration and reverse osmosis	(II).Cheese whey
(C). Ultrafiltration and reverse osmosis	(III). Butter milk
(D). Ultrafiltration and reverse osmosis	(IV).Ghee residue

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35 | 180035 | 4.0 | 1.00

Which one of the following is natural colouring matters ?

1. Sunset yellow
2. Indigo caramine
3. Tartrazine
4. Lactoflavin

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

36 | 180036 | 4.0 | 1.00

		Arrange the correct sequence of changes during cooking of meat influencing its tenderization (A).Fat melting (B).Separation of muscle fiber (C). Soft gelation (D). Formation of collagen Select the correct answer from the options given below : 1. (A),(B),(C),(D). 2. (A), (D),(C) ,(B). 3. (D),(A),(B),(C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
37	180037	Mango pulp can is an example of ---------- container. 1. Primary 2. Secondary 3. Tertiary 4. Quaternary A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
38	180038	Form-Fill-Seal- machines are equipments used for --------- of foods 1. MAP 2. CAP 3. Aseptic packaging 4. Active packaging A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
39	180039	Microbial spoilage of canned foods at ambient temperature is genearlly the result of -------- spoilage. 1. Leaker 2. Flipper 3. Hydrogen swell 4. TA A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
40	180040	The ----------was established to develop agreements on international standards and safety practices for foods and agricultural products. 1. Codex Alimentarius Commission 2. FAO 3. WHO 4. JECFA A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
41	180041	Which of the following is not the function of packaging? 1. Protection 2. Containment 3. Communication 4. Prevention of browning A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
42	180042	Which material is considered best for manufacture of drawn and ironed (D & I) type of cans? 1. Aluminium 2. Tinplate 3. Copper 4. Glass A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
43	180043	How much is the typical film thickness of enamel applied on most containers used for food packaging? 1. 1-3 micrometer 2. 4-12 micrometer 3. 15-20 micrometer 4. 25-50 micrometer A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
44	180044	The cover is made from which material in cover and plinth type of storage structure used for storage of food grains? 1. Polystyrene 2. Polypropylene 3. Polyethylene 4. Aluminium A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
45	180045	The protein efficiency ratio, one of the commonest methods used to evaluate protein quality, involves measurement of following. 1. Weight gain per unit weight of protein absorbed by body 2. Weight gain per unit weight of protein consumed 3. Weight gain per unit weight of protein assimilated 4. Weight gain per unit weight of essential amino acids consumed A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
46	180046	Consider the following sentences related to protein quality. (A) The proportion of absorbed nitrogen that is retained in the body for maintenance and/or growth is measure of biological value (BV) of proteins (B) Net protein retention (NPR) represents the biological value (BV) of proteins corrected for digestibility (C) Digestibility is the measure of proportion of consumed food nitrogen that is absorbed (D) Net protein utilization (NPU) represents the biological value (BV) of proteins corrected for digestibility Choose the ***correct*** sentences from the options given below: 1. (A), (B) and (D) only. 2. (A), (C) and (D) only. 3. (A), (B), (C) and (D). 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
47	180047		4.0	1.00

		How much should be the length:width ratio of rectangular lagoons used for effluent treatment? 1. 3:1 or less 2. 3:1 or more 3. 1:3 or less 4. 1:3 or more A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
48	180048	Which are the most common nuclei analyzed by the nuclear magnetic resonance spectroscopy? 1. Hydrogen and Oxygen 2. Hydrogen and Nitrogen 3. Carbon and Nitrogen 4. Hydrogen and Carbon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
49	180049	What is the nature of stationary phase and mobile phase in reverse phase HPLC? 1. Polar stationary phase and polar mobile phase 2. Non-polar stationary phase and non-polar mobile phase 3. Non-polar stationary phase and polar mobile phase 4. Polar stationary phase and non-polar mobile phase A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
50	180050		4.0	1.00

		Which anti-nutritional factors bind to the intestinal mucosa cells and interfere with the absorption of amino acids? 1. Trypsin inhibitors 2. Saponins 3. Tannins 4. Lectins A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
51	180051	Which precursor of the sulfur compounds is responsible for the flavor of onions? 1. S-(1-propenyl)-L-cysteine sulfoxide 2. S-(2-propenyl)-L-cysteine sulfoxide 3. Diallyl thiosulfinate 4. Thiopropanal S-oxide A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
52	180052	According to FSSAI regulations 2011, how much is the maximum permissible limit of benzoyl peroxide in refined wheat flour (*maida*) used for bakery purpose? 1. 20 ppm 2. 40 ppm 3. 60 ppm 4. 80 ppm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				

53 | 180053 | 4.0 | 1.00

Match the food additives from column I to its specific function in column II.

Column-I	Column-II
Food Additive	**Function**
(A) Carboxymethyl cellulose	(I) Firming agent
(B) Calcium peroxide	(II) Anti-caking agent
(C) Calcium silicate	(III) Stabilizing and Thickening agent
(D) Sodium aluminum sulfate	(IV) Dough improver

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

54 | 180054 | 4.0 | 1.00

Why thermoplastic packaging materials can be readily molded or extruded in a desired new shape?

1. Because thermoplastics contains cross-links in their structure
2. Because thermoplastics do not contain cross-links in their structure
3. Because thermoplastic materials can not melt on heating
4. Because thermoplastic materials blister and char on heating

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

55 | 180055 | 4.0 | 1.00

		Arrange the following food processing industries in descending order according to the typical BOD values of waste generated. (A) Dairy and milk products processing industry (B) Meat products processing industry (C) Vegetable oil industry Choose the **correct** answer from the options given below: 1. (A), (B), (C) 2. (C), (B), (A) 3. (B), (A), (C). 4. (C), (A), (B). A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
56	180056	_____ grows as pellicle on beers and wines. 1. *Pichia membranaefaciens* 2. *Enterobacter sakazaki* 3. *Escherichia coli* 4. *Enterococcus faecalis* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
57	180057	Products from oxidative deamination of the microbial decomposition of amino acids are ____. 1. Fatty acid + CO_2 2. Primary alcohol + NH_3 + CO_2 3. Fatty acid + NH_3 + CO_2 4. Keto acid + NH_3 A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
58	180058	Find the correct options from following (A). Bacteria that form capsules are more difficult to kill (B). Cells high in lipid content are harder to kill (C). Bacteria that form capsules are more easy to kill (D). Cocci usually are more resistant than rods Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only 2. (B), (C) and (D) only. 3. (C) and (D) only 4. (B) and (C) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
59	180059	_____ cultures are used as test organisms in cobalt or gamma radiation sterilization. 1. *Bacillus pumilus* (ATCC 27142) 2. *Staphylococcus aureus* (ATCC 23565) 3. *Salmonella enterica* (ATCC 12562) 4. *Enterobacter sakazaki* (ATCC 35624) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
60	180060		4.0	1.00

		Enamel coating in cans containing zinc oxide cannot be used to store _____. 1. Corn 2. Beets 3. Berries 4. Meat A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
61	180061	*Aeromonas hydrophila* growth in butter causes _____ . 1. Maltiness 2. Barny flavour 3. Fishiness 4. Flat flavour A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
62	180062	The fermented fish product called Ngari is from ___ . 1. Tamil Nadu 2. Manipur 3. Gujarat 4. Haryana A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
63	180063		4.0	1.00

		Vibrio parahaemolyticus can grow in ____ NaCl. 1. 0.0% 2. 2.0% 3. 4.0% 4. 7.0% A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
64	180064	Examples of homoglycans and heteroglycans are ____ . 1. Cellulose, and glycogen 2. Hemicellulose and mucilage 3. Glycogen and pectin 4. Pectin and resins A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
65	180065	The major pigments of black grape anthocyanins are ___ . 1. Pelargonidin 2-O-rutinoside 2. Anthocyanidin 3-O-glycosides 3. Petunidin 3-O-glucoside 4. Delphinidin 2-O-glucoside A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
66	180066		4.0	1.00

		The predominant saturated fatty acids in eggs are ___ . 1. Palmitic acid punicic acid 2. Lauric acid caprylic acid 3. Arachidic acid icosanoic acid 4. Palmitic and stearic A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
67	180067	The glycosidic insecticide extracted from red onion is ____ . 1. Acetamiprid 2. Sciliroside 3. Mirexin 4. Bifenthrin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
68	180068	Sugar free product means the product contains not more than _____ sugars per 100g/ml. 1. 0.1g 2. 0.5g 3. 1.0g 4. 1.5g A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
69	180069		4.0	1.00

		_____ are exempted from mandatory nutritional labelling. (A). Table top sweeteners (B). Salt and salt substitutes (C). Chewing gum (D). Coffee chicory mixture Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B) and (D) only. 3. (A), (B), (C) and (D). 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
70	180070	The primary treatment methods in meat industry effluent treatments reduce ____ . 1. Fat upto 70%, susepended solids upto 25% and BOD upto 10% 2. Fat upto 50%, susepended solids upto 95% and BOD upto 65% 3. Fat upto 90%, susepended solids upto 65% and BOD upto 35% 4. Fat upto 80%, susepended solids upto 45% and BOD upto 55% A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
71	180071	The recommended selective culture media to detect *Campylobacter jejuni* is _____ . 1. Modified Charcoal Cefoperazone Deoxycholate Agar 2. Modified Charcoal Tetracycline Deoxycholate Agar 3. Modified Hektoen Enteric (HE) Agar 4. Xylose Lysin Dsoxycholate Agar A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

72 | 180072 | 4.0 | 1.00

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

List-I	**List-II**
Systematic Name	**Common Name**
(A).Dodecanoic	(I). Arachidonic
(B).cis-9-Octadecenoic	(II).Lauric
(C). cis-5, cis-8, cis-11, cis-14, cis-17 Eicosapentaenoic	(III). Oleic
(D). cis-5, cis-8, cis-11, cis-14 Eicosatetraenoic	(IV).EPA

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

73 | 180073 | 4.0 | 1.00

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

List-I	List-II
Critical a_w	**Foods generally within the range of a_w**
(A).0.87-0.80	(I). Rolled oats of 10% moisture
(B).0.75-0.65	(II).Whole milk powder of 2%–3% moisture
(C). 0.60-0.50	(III). Pulses of 15%–17% moisture content
(D). 0.30-0.20	(IV).Pasta of 12% moisture content

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

74 | 180074 | 4.0 | 1.00

Hemolytic enterotoxin (HBL), nonhemolytic endotoxin (Nhe), and cytotoxin K (CytK) are produced by _____.

1. *Clostridium botulinum*
2. *Bacillus cereus*
3. *E.coli*
4. *Shigella dysenteriae*

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

75 | 180075 | 4.0 | 1.00

		Which preservatives are usually used for preservation of wine? A. Bisulfites B. Citric acid C. Diethyl pyrocarbonate D. Sorbic acid 1. B and C only 2. B and D only 3. A and C only 4. B only A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
76	180076	.....increses the steam raising capacity of a boiler. 1. Water level indicator 2. Economizer 3. Pressure guage 4. Steam stop valve A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
77	180077	The Design and fabrication of thin walled pressure vessels is covered by National Standard and Code of Practice including their inspection and testing as per ..... 1. IS2825 2. IS3832 3. IS3332 4. IS3436 A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

78 180078 4.0 1.00

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

List-I	List-II
Electrical Propertites	**Thermal Equivqlent Properties**
(A).Voltage (V)	(I). Heat(Q)
(B).Resistance (Re)	(II).Heat flow (q)
(C). Current (i)	(III). Resistance (l/AK)
(D). Charge (Q)	(IV).Temperature(t)

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

79 180079 4.0 1.00

Elevators are conveying machines for handling of bulk materials on verticle or steep slope of .....

1. 0-10 degree to the horizontal
2. 30-40 degree to the horozontal
3. 60-80 degree to the horizontal
4. In horizontal direction only

A1 : 1

A2 : 2

A3 : 3

		A4 : 4		
Objective Question				
80	180080	In SI unit, one tone of refrigeration is equivalent to ..... 1. 3.5 kW 2. 4.5 kW 3. 1 kW 4. 2.5 kW A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
81	180081	The pressure drop by a fan is directly proportional to the ..... of the fan speed. 1. Cube 2. Cube root 3. Square root 4. Square A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
82	180082	..... is defined as the ability or a system to respond to a true value of a measured variable under reference condition. 1. Precision 2. Accuracy 3. Repetability 4. Reprodctibility A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
83	180083	.....is the example of evaporative refrigeration. 1. Household refrigerator 2. Desert bag 3. Air conditioner 4. Water cooler A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
84	180084	The part of a vapour compression refrigeration in which the vapour refrigerant changes to liquid is called as ..... 1. Compressor 2. Throttling valve 3. Evaporator 4. Condenser A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
85	180085	The refrigeration system works ..... law of thermodyanmics. 1. Zeroth law 2. First law 3. Second law 4. Newton Rikhman law A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
86	180086	The ..... are the device in which hot and cold fluid alternately flow over the surface. 1. Regenerator 2. Recouperator 3. Economizer 4. Mixed tpye A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
87	180087	..... is having highest thermal conductivity. 1. Copper metal 2. Silver metal 3. Asbestos material 4. Mild steel A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
88	180088	In a throttling process ..... remains constant. 1. Temperature 2. Pressure 3. Entropy 4. Enthalpy A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
89	180089		4.0	1.00

		Which of the following is a watertube boiler? 1. Lancashire boiler 2. Locomotive boiler 3. Babcock and Wilcox boiler 4. Cochran boiler A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
90	180090	Driving force for heat transfer is ..... 1. Energy difference 2. Pressure difference 3. Temperature difference 4. Velocity difference A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
91	180091	The ------- is used to measure the volume of hygroscopic material. 1. Benzene 2. Toluene 3. Distilled water 4. Tap water A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
92	180092		4.0	1.00

		The equation which expresses the energy balance for fluid flow is -------. 1. Continuity equation 2. Bernoullis's equation 3. Fourier equation 4. Plank's equation A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
93	180093	Given below are two statements: Statement (I): Screw conveyor is generally used to move grains horizontally. Statement (II): Screw conveyor can also move grain up to an angle of 45^{o}C. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
94	180094	The ability of a screen in separating the feed into over flow and under flow according to its size is called as ---------. 1. Overall effectiveness 2. Cleanliness 3. Cleaning efficiency 4. Screen effectiveness A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
95	180095	Specific heat is the ratio of ..... 1. Heat capacity of substance to that of water 2. Heat capacity of water to that of substance 3. Thermal conductivity of substance to that of water 4. Thermal potential of substance to that of water A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
96	180096	The correct sequence of following materials with increased thermal conductivity is ------ 1. Wood - Aluminium - Brass - Steel 2. Wood - Steel - Brass - Aluminium 3. Steel - Brass - Aluminium - Wood 4. Wood - Brass - Aluminium - Steel A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
97	180097	Which method of size reduction is applicable to hammer mill? 1. Impact 2. Cutting 3. Shearing 4. Crushing A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
98	180098	Double cone mixers are used for ---------. 1. Liquid 2. Powder 3. Dough and paste 4. Semi-liquid A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
99	180099	Which of the following cannot be prepared by extruders? 1. Direct expanded corn snacks 2. Pet food 3. Corn flakes 4. Pasta products A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
100	180100	Indented cylinder separator separates the grains on the basis of ---------. 1. Weight 2. Size 3. Surface texture 4. Length A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
101	180101		4.0	1.00

		Which of the following are minimal processing technologies ? A. Sous vide B. High pressure processing C. Pulsed electrical fields D. Radio frequency heating 1. C, B and D only 2. A, B and C only 3. A, B and D only 4. A and D only A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
102	180102	Filtration is a process for separating ----------. 1. Soluble solids from liquids 2. Insoluble solids from liquids 3. Immiscible liquids from liquids 4. Immiscible liquids from solids A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
103	180103	In sterilization process, death rate is almost ---------- the initial number of viable cells. 1. Proportional to 2. Half of 3. Double 4. Four times A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

104 180104 4.0 1.00

Match List I with List II

	List I		List II
	Equipment		**Property**
(A)	Hammer mill	(I)	Grain shape
(B)	Cyclone separator	(II)	Impact
(C)	Spiral separator	(III)	Grain size
(D)	Indented cylinder separator	(IV)	Centrifugal force

Choose the correct answer from the options given below:

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

105 180105 4.0 1.00

Heat exchangers are used to ----------.

1. Heat the product
2. Cool the product
3. Heat or cool the product
4. Maintain constant temperature

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question				
106	180106	As per FSSA regulations working surfaces of vending carts shall be clean, hygienic, impermeable and easy to clean, and placed at least ..... from above ground. 1. 30 to 40 cm. 2. 50 to 55 cm. 3. 60 to 70 cm. 4. 90 to 100 cm. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
107	180107	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : *Bacillus cereus* is a pathogenic bacterium Reason (R) : As it causes foodborne diseases classified by the International Commission on Microbiological Specifications for Foods under moderate hazard. In light of the above statements, choose the *most appropriate* answer from the options given below . 1. Both A and R are false. 2. Only A is true. 3. A and R are true but R is not the correct explanation of A. 4. A and R are true and R is the correct explanation of A. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
108	180108	Which one of the following does not belong to *Enterobacteriaceae* family? 1. *Salmonella* 2. *Staphyllococcus* 3. *Escherichia coli* 4. *Shigella* A1 : 1	4.0	1.00

		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
109	180109	..... biochemical test is not used for identification of Salmonella. 1. Urea broth 2. Indole Test 3. MR-VP medium 4. Catalase test A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
110	180110	..... are sexual spores of molds. 1. Oospores 2. Arthrospores 3. Sporangiospores 4. Conidia A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
111	180111	Which one of the following is not a pigmented bacterium? 1. *Halobacterium* 2. *Flavobacterium* 3. *Micrococcus* 4. *Leuconostoc* A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
112	180112	Liquid flows in a pipe at a velocity of 5.47 f/s, what will be its velocity in m/min ? 1. 90 2. 100 3. 105 4. 110 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
113	180113	Which one of the following statements is not true about the heat resistance of vegetative cells of bacteria? 1. Thermophiles are more resistant to heat. 2. Bacteria forming clumps or capsules are more difficult to kill. 3. Bacterial cells high in lipid are harder to kill. 4. Rods are usually more resistant to heat than cocci. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
114	180114	.... ionizing rays/particles have residual radioactivity that is why these are not used in food preservation. 1. Alpha 2. Protons 3. Neutrons 4. Beta A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
115	180115	Which one of the following is an objective of Primary waste water treatment? 1. Removal of settleable organic and inorganic solids by sedimentation. 2. Removal of coarse solids 3. Removal of large objects. 4. Removal of organic matter by biological treatment A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
116	180116	The Environment (Protection) Act 1986 the competent authority RCGM stands for ------ 1. Review Committee on Genetic Manufacture 2. Review Committee on Generic Manipulation 3. Review Committee on Genetic Manipulation 4. Revenue Committee on Genetic Manufacture A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
117	180117	A characteristic cysteine loop in the structure of Enterotoxin is seen in the toxin produced by ..... 1. *Salmonella* 2. *Bacillus* 3. *Yersinia* 4. *Staphylococcus* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

118 | 180118 | 4.0 | 1.00

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

List-I	**List-II**
Enzyme	**Organisum**
(A).Glucose isomerase	(I). *Bacillus polymyxa*
(B).Proteases	(II).*Tricoderma viridae*
(C). Beta amylase	(III).*Streptomyces flavogriseus*
(D).Cellulase	(IV).*Aspergillus oryzae*

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

119 | 180119 | 4.0 | 1.00

The leavening in Idli batter is primarily due to -----

1. *Aureobasidium spp*
2. *Leuconostoc mesenteroides*
3. *Alcaligenes faecalis*
4. *Saccharomyces cerevisiae*

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

120 | 180120 | 4.0 | 1.00

The correct sequence (Chronology) of introduction of following Organizations/Standards/Regulations.

(A).FAO

(B).WHO

(C).JECFA

(D).CAC

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4