

PREVIEW QUESTION BANK

Module Name : DAIRY 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	170001	Which of the following terms best describe "odour blindness" in population? 1. Insomina 2. Sensory processing disorder 3. Anosmia 4. Ageusia A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	170002	In which of the following sensory evaluation techniques, the task of a panelist is to indicate a sample which is most similar to the reference product or sample? 1. Duo-Trio Test 2. Paired comparison test 3. Triangle test 4. Dual standard test A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	170003	The type of errors made by sensory panellists wherein when a product of "poor" quality was presented followed by a product of "higher" quality, the difference was exaggerated, and the higher quality product was scored much higher than if it was preceded by a product close in quality is referred to as _____ 1. Proximity error 2. Stimulus error 3. Contrast and convergence error 4. Time-order error A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
4	170004	Which of the following types of illustrations or graphs are used for detecting the origin of sensory quality loss during food processing? 1. Bar graph 2. Biplot of Principal Component Analysis 3. Fishbone diagram 4. Correlation heat maps A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	170005	Which of the following closures create partial vacuum? 1. Roll-on cap 2. Crown cap 3. Lug cap 4. Cork cap A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
6	170006	Which of the following is a "popular term" of "cohesiveness" of a food product? 1. Soft 2. Sticky 3. Crunchy 4. Gooney A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
7	170007	Which of the following environmental conditions are considered as desirable for a sensory evaluation laboratory? 1. 20-22 °C and 60-70% RH 2. 30-32 °C and 60-70% RH 3. 20-22 °C and 40-50% RH 4. 30-32 °C and 40-50% RH A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
8	170008	Arrange the following food package development process stages and choose the correct option representing its correct order. (A). Test package system in market (B). Select package materials and equipment (C). Determine product and/or package requirements (D). Evaluate prototype packages Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (C), (B), (D), (A). 3. (B), (A), (D), (C). 4. (D), (C), (B), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
9	170009		4.0	1.00

Which of the following are the minor atoms commonly found in plastics?

1. Cr, and Sn
2. Na, Al, K, and Ca
3. O, N, and Cl
4. Si, and O

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

10 170010 4.0 1.00

In general, which of the following packaging materials have the highest "haze values"?

1. Glass
2. Cellophane
3. High density polyethylene
4. Low density polyethylene

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

11 170011 4.0 1.00

Which of the following membrane processing techniques is also called as "hyperfiltration"?

1. Ultrafiltration
2. Reverse Osmosis
3. Nanofiltration
4. Microfiltration

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

12 170012 4.0 1.00

In a dairy plant, while subjecting coagulated skim milk to membrane processing at 50 °C, the average flux started at a very high level of 165 L/h.m² and slowly declined to an average level of 86 L/h.m² so as to get a concentration factor of 4. Such high flux could be achieved with which type of membranes?

1. Cellulose acetate membrane
2. Polysulphone membrane
3. Ceramic membrane
4. Thin-film composite membrane

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

13	170013	Which of the following is considered as a typical pressure range for cleaning ultrafiltration plants?	4.0	1.00
		1. 0.8 to 1.8 bar 2. 2.5 to 4.5 bar 3. 15 to 20 bar 4. 8 to 10 bar		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

14	170014	Read the below-given statements related to food package labelling. (A). A packaged food label shall <u>not</u> contain a "coined" or "fanciful" brand or trade name. (B). When a food formulation contains modified starch as an ingredient, it is mentioned in the list of ingredients as "modified starch" only. (C). If the principal display panel area is above 500 cm² and below 2500 cm², then the circle's diameter in the vegetarian logo is minimum 8 mm. (D). If any food product has more than 10% polyols as an ingredient, it is declared as "Polyols may have laxative effect". Choose the correct answer/option as per the FSS (Labelling and Display) Regulations (2020) from the options given below: 1. (A), (B) and (D) only. 2. (D) only. 3. (B) only. 4. (B) and (C) only.	4.0	1.00
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		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
15	170015	A new dairy-based start-up company is planning to launch "unripened cheese" with a preservative "nisin" in to the market and struggling with listing of ingredients on the package label as per the INS system. As a Dairy Technologist, what INS number do you suggest to the start-up company to be printed? 1. INS 234 2. INS 330 3. INS 280 4. INS 100 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
16	170016	Which of the following is used as an important additive in one of the intelligent food packaging systems? 1. Potassium permanganate 2. Titanium dioxide 3. Iron powder 4. Glycerol A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
17	170017		4.0	1.00

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

List-I	List-II
(Book Title)	(Author/Editor Names)
(A). Food Packaging Science and Technology	(I). J.F. Hanlon, R.J. Kelsey, and H.E. Forcinio
(B). Handbook of Package Engineering	(II). D.S. Lee, K.L. Yam, and L. Piergiovanni
(C). Food Packaging Technology	(III). F.A. Paine and H.Y. Paine
(D). Handbook of Food Packaging	(IV). R. Coles, D. McDowell, and M.J. Kirwan

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

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

18	170018	Which of the following is not true with Nylon packaging material?	4.0	1.00
		1. Increased number of carbon atoms in the chain decreases melting point 2. Constitutional unit of Nylon-6 is ϵ-caprolactam 3. Constitutional unit of Nylon 6,6 is a result of combination of hexamethylene diamine and adipic acid. 4. Puncture resistance of nylon does not depend on -C=O and -HN-bonds.		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

19	170019		4.0	1.00
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Which of the following gases is commonly used as a filler in modified atmosphere packages to prevent collapse of pack caused due to dissolving of CO₂?

1. Oxygen
2. Argon
3. Carbon monoxide
4. Nitrogen

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

20	170020	Which of the following packaging forms is made by thermoforming technique?	4.0	1.00
		1. Dahi cup 2. Beverage bottle 3. Metallized film for dairy whitener 4. 6-Layered aseptic carton for UHTmilk		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

21	170021	What is the inhibitory level of penicillin for starter organism <i>Lactococcus lactis</i> ?	4.0	1.00
		1. 0.01-0.05 IU/mL 2. 0.05-0.10 IU/mL 3. 0.10-0.25 IU/mL 4. 0.20-0.35 IU/mL		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

22	170022		4.0	1.00
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Which of the following statement/s is/ are incorrect regarding annatto colour used in cheese and butter preparation?

- (A). The pigment in annatto is acid bixin, which in alkaline extract become norbixin
- (B). The colour is composed of tints of yellow and red units, and in cheese it becomes a protein dye attached to whey protein
- (C). Annatto is not very susceptible to oxidation due to various agents and air.
- (D). Bixin is a monomethyl dicarboxylic acid and is directly soluble in vegetable oil

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

23 170023

4.0

1.00

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

List-I	List-II
Milk coagulating enzymes	Coagulation to Proteolysis Ratio
(A). Chymosin	(I). 0.15
(B). <i>Rhizomucor</i> rennet	(II). 1.40
(C). <i>Endothia</i> rennet	(III). 0.04
(D). Bovine pepsin	(IV) 0.52

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

24	170024	The following indicate the steps of the protocol of Horrall & Elliker Activity Test. Arrange the steps in proper order (A). Inoculate each tube with starter to be tested at the rate of 3%. (B). Take required number of test tubes, each containing 10 ml autoclave reconstituted non-fat-dry milk (10% TS, antibiotic free). (C). Titrate for acidity using 0.1 N NaOH and 1 ml of phenolphthalein as an indicator. (D). Development of 0.40% acidity indicate an active culture expecting good activity in cheese vat. (E). Incubate for 3.5 h at 37.8 °C. Choose the correct answer from the options given below: 1. (A), (B), (D), (C), (E). 2. (B), (A), (E), (C), (D). 3. (B), (A), (C), (E), (D). 4. (B), (A), (D), (E), (C).	4.0	1.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

25	170025	The symbiotic relationship between <i>S. thermophilus</i> and <i>L. bulgaricus</i> in the yoghurt starter culture has been observed and the following Symbiosis mechanisms being observed in the system Statement (I): It is demonstrated that <i>S. thermophilus</i> produces glycine and histine which stimulates the growth of <i>L. bulgaricus</i>, whereas formic acid produced by <i>L. bulgaricus</i> stimulate the growth of <i>S. thermophilus</i>. Statement (II): Pyruvic acid produced by <i>S. thermophilus</i> stimulate the growth of <i>L. bulgaricus</i>. Statement (III): Carbon dioxide produced by <i>S. thermophilus</i> creates anaerobic conditions & support the growth of <i>L. bulgaricus</i>. Statement (IV): The observation of symbiotic relationship between <i>S. thermophilus</i> and <i>L. bulgaricus</i> in the yoghurt starter culture was first reported by Orla-Jensen. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. 1. Both Statement (I) and Statement (II) are correct, however Statement (III) and Statement (IV) are incorrect. 2. Both Statement (II) and Statement (III) are correct, however Statement (I) and Statement (IV) are incorrect 3. Statement (I) is incorrect but Statement (II), (III) & (IV) are correct. 4. Both Statement (I) and Statement (IV) are correct, however Statement (II) and Statement (III) are incorrect	4.0	1.00
		A1 : 1		

A2 : 2

A3 : 3

A4 : 4

Objective Question

26	170026	4.0	1.00
Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Ghee produced in cotton tract areas is having different legal specification than normal ghee. Reason (B) : Fatty acids like malvalic and sterculic acids (containing cyclopropene ring) are absent in milk fat but are present in cotton seed oil. Reason (C): In some places of India, cotton seed is fed extensively to dairy animals which changes the physico-chemical constants and fatty acid profile of the milk fat. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (B) and (C) are true and (B) is the correct explanation of (A). - Both (B) and (C) are true and (C) is the correct explanation of (A). (C) is true but (B) is false and (C) is the correct explanation of (A). - Both (B) and (C) are true and (B) & (C) are the correct explanation of (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

27	170027	4.0	1.00
Take 1-2 g molten ghee sample and dissolve in 2-3 mL hexane. Add 1.5-2.0 mL of colour developing reagent consisting of water, sulphuric acid and nitric acid in the ratio of 20:6:14. Shake vigorously and keep it undisturbed until it gets separated into two layers. Appearance of distinct orange colour in upper layer indicates presence of "x" component in ghee. What is "x"? - Animal body fat - Mineral oil - Vanaspati - Vegetable oil A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

28	170028	Given below are two statements: Statement (I): Milk fat is relatively high in short chain and medium chain fatty acids which have been reported to have antimicrobial activity. Statement (II): The short chain fatty acids in milk fat also promote growth of <i>Lactobacillus bifidum</i> in intestine. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. - Statement (I) is correct but Statement (II) is incorrect. - Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

29	170029	Determine the amount of neutralizers required for neutralizing 1200 g cream with an initial acidity of 0.44% to a final desired acidity of 0.14% by using calcium hydroxide as neutralizer. 1.48 g 2.45 g 4.80 g 7.50 g A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

30	170030		4.0	1.00
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Given below are statements regarding Inclined Scraped Surface Heat Exchanger (ISSHE) Continuous Khoa Making Machine

Statement (I): Concentrated milk having 40-45% total solids is pumped into the inlet of the ISSHE at the desired flow rate by adjusting the capacity of the feed pump.

Statement (II): It can produce only about 20 kg khoa per hour, but installing more such units can increase the capacity.

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

1. Statement (I) and Statement (II) are correct.
2. 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

Objective Question

31 170031

4.0

1.00

The percentage of distribution of milk-constituents in cow milk *chhana* is being given in Table. Match Milk constituents (List-I) with Percentage of distribution in cow milk *chhana* (List-II).

Milk constituents	Percentage distribution in cow milk <i>chhana</i>
(A). Protein	(I). 58
(B). Lactose	(II). 48
(C). Mineral	(III). 89
(D). Total solids	(IV). 7

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

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

A1 : 1

A2 : 2

A3 : 3

		A4 : 4		
Objective Question				
32	170032	Condensed milk contains 30% total milk solids and 45% added sugar. What is the sugar ratio? 1. 62.5% 2. 63.8% 3. 64.3% 4. 61.75% A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
33	170033	Quality information of a sample of sweetened condensed milk A sample of condensed milk have been tested with 9% fat, 22% solids-not-fat, 42.5% sucrose, 26% water and 12% lactose. The sample have been detected with 1,80,000 no. of lactose crystals per cubic mm and the size of the cryatal is being found as 12 micron as the length of the longest edge of the crystal. How do you grade the textural quality of the sample? 1. Good 2. Pasty 3. Mealy 4. Sandy A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
34	170034		4.0	1.00

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

Assertion (A) : The higher the acidity and lower the pH, the lower the heat-stability, and vice versa.

Reason (R) : Addition of acid to milk, results in decrease of ionic calcium, which in turn disturbs the salt balance and lower the heat stability.

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. The statement (A) is true but (R) is false.
4. The statement (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35 170035

4.0 1.00

The judging and grading parameters for condensed milk with their scores is being listed in table. Match parameters (**List-I**) with their perfect score (**List-II**).

List-I	List-II
Parameters	Perfect score
(A). Flavour & odour	(I). 5
(B). Body & texture	(II). 10
(C). Colour	(III). 25
(D). Sugar	(IV). 30

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

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

A1 : 1

A2 : 2

A3 : 3

		A4 : 4		
Objective Question				
36	170036	Given below are two statements: Statement (I): The cyclone separator is normally used for separation of material between 5 and 200 microns. Statement (II): As the size of the particle decreases, the efficiency of cyclone increases. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. - Statement (I) is correct but Statement (II) is incorrect. - Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
37	170037	Given below are the steps involved in the process of drum drying of milk. Arrange them in correct order. (A). Adjustable pump (B). Milk concentrate (C).Feeding (D) Grinder (E) Scraper Choose the correct answer from the options given below: (B), (A), (C), (D), (E). (C), (B), (A), (E), (D). (B), (A), (D), (C), (E). (B), (A), (C), (E), (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
38	170038		4.0	1.00

Sodium alginate (E401) is a polysaccharide of and

1. galactose and m-3,6-anhydrogalactose.
2. galactose and mannose.
3. gluconic acid and galacturonic acid.
4. guluronic acid and mannuronic acid.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

39 170039

4.0

1.00

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

List-I	List-II
Constituent of soft ice cream	Percentage
(A).Fat	(I). 0.4 to 0.6
(B).Sugar	(II). 3 to 6
(C). Milk-solids-not-fat	(III). 12 to 15
(D). Stabilizer and emulsifier	(IV).11 to14

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

40 170040

4.0

1.00

What could be the probable reason for the soggy body defect in ice cream?

- (A). Low overrun
- (B). High sugar content
- (C). Low stabilizer content
- (D). Excessive stabilizer content

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

41	170041	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Tyndallisation is a thermal process which involves successive heat treatments in order to inactivate spores. Reason (R) : If a medium is heated at 100 °C for 3 minutes on three successive days, first the vegetative cells would be killed and the spores will germinate and then be killed either the second day or third day. However, this process is not successful because of the unpredictability of spore germination process. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below . 1. Both (A) and (R) are correct and (R) is the correct explanation of (A). 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). 3. (A) is correct but (R) is not correct. 4. (A) is not correct but (R) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

42	170042		4.0	1.00
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Generally heat inactivation of microorganisms follows _____ order reaction kinetics.

1. Zero
2. First
3. Second
4. Third

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

43	170043	4.0	1.00
Microwave heating is a non-conventional source which can be used in dairy processing. Which among the following statement(s) is(are) correct for microwave radiations? (A). Microwave radiations used in food processing are electromagnetic radiations (B). Microwave radiations used in food processing are ionizing radiations (C). Microwave radiations used in food processing are non-ionizing radiations (D). Microwave radiations heat food by dielectric heating Choose the correct answer 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			

Objective Question

44	170044	4.0	1.00
Pasteurization of milk is aimed at achieving at least _____ log reduction of <i>Coxiella burnetii</i> in whole milk. 1. 1 2. 3 3. 5 4. 7 A1 : 1			

A2 : 2

A3 : 3

A4 : 4

Objective Question

45	170045	Which among the following is/are indirect heating approach (es) used in milk processing? (A) Pasteurization of milk using plate heat exchanger (B) UHT treatment of milk using tubular heat exchanger (C) In-bottle sterilization of flavoured milk (D) UHT treatment of milk with innovative steam injection 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (C) and (D) only. 4. (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

46	170046	Arrange following steps in correct manner for CIP cycle of a HTST pasteurizer. (A). Pre-rinse (B). Diluted alkali circulation followed by rinsing (C). Diluted acid circulation followed by rinsing (D). Disinfect with hot water Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (A), (C), (B), (D). 3. (A), (D), (B), (C) 4. (A), (D), (C), (B). A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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		A4 : 4		
Objective Question				
47	170047	Homogenization of milk increases the fat surface area up to _____ fold. 1 to 2 fold 4 to 6 fold 10 to 20 fold 50 to 100 fold A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
48	170048	Given below are two statements: Statement (I): Homogenization increases the heat stability of whole milk. Statement (II): Homogenization has no effect on the heat stability of skim milk. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. - Statement (I) is correct but Statement (II) is incorrect. - Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
49	170049	How many parts by weight of cream (40% fat) and milk (3% fat) should be mixed to make milk testing 5% fat? 2 parts of cream with 35 parts of milk 2 parts of cream with 37 parts of milk 5 parts of cream with 35 parts of milk 5 parts of cream with 37 parts of milk A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

50	170050	Among the seven principles, fourth (4th) principle of HACCP deals with 1. Establish critical limits for each critical control points 2. Establish a monitoring system for each critical control points 3. Establish corrective actions 4. Establish verification procedures A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

51	170051	During HACCP application, criterion which separates acceptability from unacceptability is termed as: 1. Control point 2. Critical control point 3. Critical limit 4. Corrective action A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

52	170052		4.0	1.00
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Given below are two statements:

Statement (I): During centrifugal separation of milk, the velocity of milk fat globule is inversely proportional to viscosity of skim milk

Statement (II): During centrifugal separation of milk, the velocity of milk fat globule is directly proportional to effective radius of the centrifuge

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

1. Both Statement (I) and Statement (II) are True.
2. Statement (I) is True but Statement (II) is False.
3. Statement (I) is False but Statement (II) is True.
4. Both Statement (I) and Statement (II) are False.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

53	170053		4.0	1.00
Arrange the following in descending order of their densities (A). Whole milk (B). Skim milk (C). Bacteria (D). Heat resistant spores Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (C), (D), (B), (A). 3. (D), (C), (B), (A). 4. (D), (C), (A), (B). A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

54	170054		4.0	1.00
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The ideal operational temperature for bactofugation of milk is_____

1. 15 to 20 °C
2. 35 to 40 °C
3. 55 to 60 °C
4. 65 to 70 °C

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

55	170055	Expanded form of SCADA, a system popularly used in the automation of dairy processes is 1. Systematic Control and Data Acquisition 2. Supervisory Control and Data Acquisition 3. Systematic Control and Data Assessment 4. Supervisory Control and Data Appearance A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

56	170056		4.0	1.00
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Match **List-I** with **List-II**

List-I	List-II
(Sensor/Actuator)	(Basis of Technology.)
(A). Temperature	(I). Solenoid valves
(B). Pneumatic on/off valves	(II). Thermocouple
(C). Weight	(III). Electrodes
(D). Conductivity	(IV). Load cells

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

57	170057	It is a device that serves to maintain the process variable value at the set point. It receives the signal of measured variable and compares with that of preset value. What type of device it is? 1. Sensors 2. Actuators 3. Transducers 4. Controllers A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

58	170058		4.0	1.00
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The demineralization of whey can be achieved by_____.

- (A) Electrodialysis
- (B) Ion-exchange process
- (C) Reverse osmosis
- (D) Loose Reverse osmosis

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

59	170059	Casein micelles can bind large amount (_____ g per g protein) of water as compared to globular milk proteins. 1. 0.3 to 0.5 g per g protein 2. 2 to 4 g per g protein 3. 5 to 8 g per g protein 4. 10 to 15 g per g protein A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

60	170060	According to recent FSSR (2011) standards, lactose content (% m/m) in edible rennet casein should be _____ 1. Not more than 1.0 % 2. Not less than 1.0 % 3. Not more than 2.0 % 4. Not less than 2.0 % A1 : 1 A2 : 2	4.0	1.00
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A3 : 3

A4 : 4

Objective Question

61	170061	Glass is not used for which of the following? 1. Level Gauges 2. Light Window 3. Manhole Cover 4. Sight Window A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

62	170062	To keep the gaskets in place on a PHE plate, which of the below given methods can be used? (I) Glues (II) Gasket cement (III) Mechanical Methods (IV) Evacuation methods Choose the correct answer from the options given below: 1. (I), (II) and (III) only 2. (I), (III) and (IV) only 3. (III) and (IV) only 4. (I) and (II) only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

63	170063		4.0	1.00
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The percentage of carbon in mild steel is in the range of _____

1. 2 to 4.5
2. 0.1 to 0.25
3. 1.5 to 2.0
4. 0.06 to 0.08

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

64	170064	What are the major factors that decide CIP protocol? (I) Temperature (II) Titration (III) Turbulence (IV) Time (V) Turbidity Choose all that applies 1. (I), (II), (III) and (IV) only 2. (I), (II) and (III) only 3. (I), (II) and (V) only 4. (II) and (III) only	4.0	1.00
		A1 : 1 A2 : 2 A3 : 3 A4 : 4		

Objective Question

65	170065	To make lye solution for cleaning a jacketed process vessel of capacity 1000 litres, how much solid NaOH (in kg) would you dissolve per liter of water? 1. 1.5 - 2.0 2. 0.015 - 0.020 3. 0.15 - 0.20 4. 15 - 20	4.0	1.00
		A1 : 1 A2 : 2		

A3 : 3

A4 : 4

Objective Question

66

170066

4.0

1.00

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

List-I	List-II
(A). Laplace Number	(I). Inverted position
(B). Air Cylinder	(II). Dimensionless homogenizing pressure
(C). Homogenising Valve	(III). Valve with a breaker ring which has a flat valve face and a conical seat
(D). Turbulence	(IV). Does not relate to homogenisation

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

67	170067	Given below are two statements: Statement (I): Homogenized milk must be packaged in opaque containers, such as cartons, plastic containers or coloured bottles. Statement (II): Besides triple stage piston pumps, five- stage ones are often used for homogenizing because of their even feed characteristics. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are true. - Both Statement (I) and Statement (II) are false. - Statement (I) is true but Statement (II) is false. - Statement (I) is false but Statement (II) is true. A1 : 1	4.0	1.00
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A2 : 2

A3 : 3

A4 : 4

Objective Question

68 170068

4.0

1.00

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

List-I	List-II
(A). Homogenized milk is sensitive to	(I). Sunlight Flavour
(B). Invention of Homogenization	(II). Energy Saving
(C). Defect due to homogenisation	(III). Lipases
(D). Partial Homogenisation	(IV). Gaulin

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

69 170069

4.0

1.00

Which of the following can be suitable for citing as an example for a second order reaction?

- Aerobic degradation of ascorbic acid
- Neutralisation of an acid with a base
- Non chemical inactivation of enzymes
- Thermal destruction of micro-organisms

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

- (I) and (II) only
- (I) only
- (I), (II) and (III) only
- (II) and (III) only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

70	170070	In the context of reaction kinetics, Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Rate of reaction generally decreases with an increase in order of reaction. Reason (R) : Reduction in reaction rate is due to less likelihood of a collision between the molecules taking part in reaction. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

71	170071	A gas phase reaction has energy of activation as 200 kJ/mol. If the frequency factor of the reaction is 1.6×10^{13} per second. Calculate the rate constant (in per second) at 600 K. (take $e^{-40.09} = 3.8 \times 10^{-18}$) 0.0000421 0.0000241 0.0000621 0.0000162 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

72	170072		4.0	1.00
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_____ is the induced motion of a material in a specified way usually in a circulatory pattern inside some sort of container.

1. Mixing
2. Agitation
3. Turbulence
4. Internal Flow

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

73	170073	Which of the following is not the use of baffles?	4.0	1.00
1. Increase the effect of agitation 2. Improve aeration efficiency 3. Improve cooling capacity 4. Improve the fermenter capacity				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

74	170074	What is the degree of agitation if bulk fluid velocity is 23.55 m/min? (For 6 m/min., degree of agitation = 1 and Degree of agitation varies from 0 to 10)	4.0	1.00
1. 4 2. 3 3. 5 4. 6				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

75	170075		4.0	1.00
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		Fluid height in a tank, $H = 16\text{ m}$ and Diameter of the tank, $D = 14\text{ m}$. Calculate the slurry volume in the tank. 1. 2450 m^3 2. 2463 m^3 3. 3450 m^3 4. 3463 m^3 A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

76	170076	For a dairy plant layout, in general, the total window area may be _____ 1. 20-25% of floor area 2. 30-40% of floor area 3. 10-15% of the floor area 4. 05-10% of the floor area A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

77	170077		4.0	1.00
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Match **List-I** with **List-II**

List-I	List-II
(A). Hollow glazed tiles	(I). Rolling shutter
(B). Hard board	(II). Insulation
(C). Cork	(III). False ceiling
(D). Mild steel	(IV). Water resistance

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

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

78 170078

4.0 1.00

Following are the operations for building a milk processing plant's process section. Arrange them in correct order.

- (A). Floor
- (B). Sewerage/Drainage network
- (C). Walls
- (D). Foundation

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

Objective Question

79	170079	4.0	1.00
In connection with Dairy Plant layout, given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The standard chain height for an above-floor conveyor in most plants is between 18 and 22 inches. Reason (R) : The top of the case is generally 30 to 36 inches off the floor, which is the most convenient working height for most washer and filler operators. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

80	170080	4.0	1.00
In connection with Dairy Plant layout, given below are two statements Statement (I): The milk path should be as short as possible. Statement (II): Location of milk silo outside the building area may save space and construction cost. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are true. - Both Statement (I) and Statement (II) are false. - Statement (I) is true but Statement (II) is false. - Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4			

Objective Question

81	170081	4.0	1.00
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In connection with Electrical Engineering, given below are two statements

Statement (I): Lenz's law states that the direction of electro-magnetic induced current will be in such a direction so as to oppose the very cause which produces it.

Statement (II): The resonance frequency is defined as the frequency at which the impedance of the circuit is at a minimum.

In light of the above statements, choose the *most appropriate* 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.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

82	170082	The sequence of steps to apply Thevenin theorem are given below. A) Load resistance is removed to create an open circuit. B) Find out the open circuit voltage between points 'A' and 'B' which is also known as thevenin voltage. C) Resistance across points A and B is determined by replacing emf 'E' by internal resistance 'r' also called as Thevenin resistance. D) Current flowing through load resistance R_L is then calculated. E) The network is replaced by Thevenin voltage E_{th}, internal resistance R_{th} and load resistance R_L. Choose the correct sequence option from given below: 1. A, B, C, E, D 2. A, B, D, C, E 3. A, B, C, D, E 4. A, C, B, D, E A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
83	170083		4.0	1.00

Which of the following can be classified under device used to modulate AC voltage ?

- (I) Variac
- (II) Step-up transformer
- (III) Dynamo
- (IV) Step down transformer
- (V) Alternator

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

- 1. (I) only
- 2. (I), (II) and (IV)
- 3. (II) and (IV)
- 4. (I), (II) and (V)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

84	170084	What would be the correct sequence in order to get an increasing numerical value (magnitude) of a physical quantity using following units. A) W/K B) kcal/h °C C) BTU/h °F D) kJ/s K Choose the correct answer from the options given below: 1. D, B, A, C 2. A, B, D, C 3. D, A, B, C 4. A, D, B, C A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
85	170085		4.0	1.00

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Effectiveness-NTU method is based on effectiveness of a heat exchanger in transferring a given amount of heat. Reason (R) : Effectiveness-NTU method is used for heat exchanger analysis if the terminal temperatures of the fluids are not known. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true.				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				
Objective Question				
86	170086		4.0	1.00
In order to achieve maximum heat dissipation, the fin should be designed in such a way that it has a _____ - Maximum lateral surface towards the tip side of fin - Minimum lateral surface near the center line - Maximum lateral surface at the root side of fin - Maximum lateral surface near the center of fin				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				
Objective Question				
87	170087		4.0	1.00

Given below are the strokes of a 4-stroke S.I engine. Arrange them in their correct sequence.

- A. Suction of fresh charge
- B. Compression of fresh charge
- C. Expansion of high pressure burnt gases
- D. Exhaust of burnt fuel i.e. smoke

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

- 1. A, B, C, D
- 2. A, C, B, D
- 3. D, C, A, B
- 4. B, D, C, A

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

88	170088		4.0	1.00
Which of the following is eligible for application of Kick's law? (I) Size reduction of brittle material (II) Plastic deformation in elastic limits (III) Coarse grinding (IV) Screen analysis Choose the correct answer from the options given below: 1. (I) only 2. (I), (II) and (III) 3. (II) only 4. (II) and (III) only A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

89	170089		4.0	1.00
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Match **List-I** with **List-II**

List-I	List-II
(A). Rittinger's Law	(I). Mechanical separation
(B). Bond's Law	(II). Size reduction
(C). Crusher	(III). Work Index
(D). Cyclone Separator	(IV). Fine grinding

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

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

90	170090	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Wire mesh screen should be steeper pitched. Reason (R) : Wire mesh screen retard seed movement enough to give thorough sifting. In light of the above statements, choose the <i>correct</i> 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. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
91	170091		4.0	1.00

Plate heat exchanger is most efficient when the volumetric flow rate on either side of plate is _____

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

92	170092	In general, the proportion of section-wise heat transfer areas in a HTST pasteurizer, is _____ 1. Regeneration > Heating > Cooling 2. Regeneration> Cooling > Heating 3. Heating > Regeneration> Cooling 4. Heating > Cooling > Regeneration A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

93	170093	In which of the HTST pasteurizer sections, the log mean temperature difference values cannot be directly used in plate heat exchanger? 1. Regeneration section 2. Heating section 3. Cooling section 4. Holding section A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

94	170094	Latest plate heat exchanger type developed to process the milk is _____ 1. Plate pack heat exchanger 2. Plate pack exchanger without gasket 3. Plate pack heat exchanger with adhesive glue gasket 4. Clip-On-Type plate heat exchanger A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

95	170095	Under a standard design of membrane operating conditions, which of the following results in highest flux? 1. acid whey 2. sweet whey 3. whole milk 4. skim milk A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

96	170096	For which of the following reasons, the operative pressures in UHT plant (indirect type) has to be about 4 bar? 1. Frictional losses for fluid flow 2. To stabilize pressures on either side of heat transfer area 3. To overcome vapour pressure of the fluid being heated 4. For better turbulence and heat transfer A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

97	170097	The vapor separator fitted in a Mechanical Vapor Recompressor (MVR) calandria is of _____ - Externally fitted vapor separator - Integrated warp - around vapor separator - Liquid – liquid vapor separator - Liquid – crystal vapor separator A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

98	170098	Formation of liquid droplets by any type of atomizer in a spray drier is based on _____ - Unstable free cone when its circumference is greater than its length - Disturbance wave length with amplitude 2 times greater than diameter - Unstable free cone when its length is greater than its circumference - Disturbance wave length with amplitude 4 times greater than diameter A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

99	170099	Vacuum in a vacuum pan is maintained by _____ - Vacuum pump - Condensate pump - Finisher calandria - Condenser A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

100	170100	In which of the following, more amount of steam is utilized to evaporate water from milk? 1. Open type of evaporator 2. Vacuum Pan 3. Multiple effect evaporator 4. Double effect evaporator A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

101	170101	Which of the following equipment utilizes more energy for less drying rate in a multi stage spray dryer? 1. Spray dryer 2. Static Fluid Bed dryer 3. Vibro Fluid Bed dryer 4. Bag filter A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

102	170102	For high initial feed temperature, when other factors remain same, in which type of feed systems the steam economy is highest? 1. Forward feed 2. Mixed feed 3. Backward feed 4. Parallel feed A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question			
103	170103	Spray drying takes place at_____ 1. Dry bulb temperature of inlet air 2. Wet bulb temperature of inlet air 3. Dew point temperature of inlet air 4. Outlet air temperature A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0 1.00
Objective Question			
104	170104	What does FORTRAN stand for? 1. For translation 2. Formula translation 3. For transcription 4. For tracking A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0 1.00
Objective Question			
105	170105	Lotus 1-2-3 is a _____ 1. Word document 2. Database 3. Spreadsheet 4. Programme A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0 1.00

Objective Question

106

170106

4.0

1.00

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

List-I	List-II
(A). Capillarity	(I). Cavitation
(B). Vapour pressure	(II). Density of water
(C). Viscosity	(III). Shear forces
(D). Specific volume	(IV). Surface tension

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

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

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

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107	170107	Which of the following correctly states how the viscosities of a liquid and a gas will change with temperature? - Viscosity increases with the increase in temperature of a liquid and decreases with the increase in temperature of a gas - Viscosity increases with the increase in temperature of a liquid and increases with the increase in - Viscosity decreases with the increase in temperature of a liquid and decreases with the increase in temperature of a gas - Viscosity decreases with the increase in temperature of a liquid and increases with the increase in temperature of a gas A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

108	170108		4.0	1.00
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Which of the following is a Spreadsheet software?

1. Power BI
2. Tableau
3. Numbers
4. Dbase III

A1 : 1

A2 : 2

A3 : 3

A4 : 4

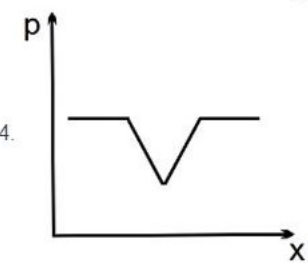
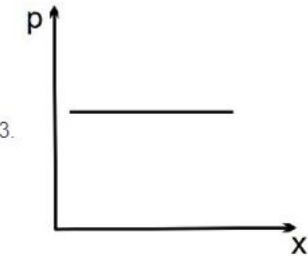
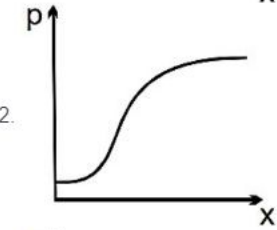
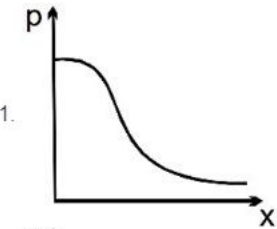
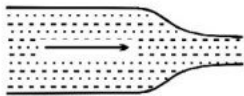
Objective Question

109	170109	Bernoulli's equation holds only for _____ 1. Low viscosity and incompressible fluids in turbulent flow 2. High viscosity and compressible fluids in streamline flow 3. Low viscosity and compressible fluids in turbulent flow 4. Low viscosity and incompressible fluids in streamline flow A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

110	170110		4.0	1.00
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Water flows through a frictionless duct with a cross-section varying as shown in figure. Pressure 'p' at points along the axis is represented by



A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

111 170111

4.0 1.00

Type of pump which is selected usually for high discharge pressure and avoid water hammer effect is _____

- 1. Single cylinder Centrifugal pump
- 2. Multi Cylinder Centrifugal pump
- 3. Multistage Centrifugal pump
- 4. Multistage Reciprocating pump

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

112	170112	Based on the following two statements related to the specific speed of the centrifugal pump, select the correct option. Statement(1): The specific speed (N_s) of a centrifugal pump is defined as the speed (in rpm) at which it works most efficiently. Statement (2): The specific speed is a characteristic of pumps that can be used as basis for comparing the performance of centrifugal pumps. 1. Statement 1 is true, but statement 2 is false 2. Both statements 1 and 2 are true 3. Statement 2 is true, but statement 1 is false 4. Both statement 1 and 2 are false. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

113	170113	Which of the following is/are not example/s of rotary displacement pumps? 1. Gear pump 2. Vane pump 3. Rotary piston pump 4. Centrifugal pump A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

114	170114		4.0	1.00
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Which of the following is a unit of dynamic viscosity?

1. $[M^1 L^1 T^{-1}]$
2. $M^1 L^{-1} T^{-1}$
3. $[M^1 L^{-2} T^{-2}]$
4. $[M^1 L^{-2} T^2]$

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115	170115	How can we write specific mass using the MLT system?	4.0	1.00
1. $[M][L][T]^{-2}$ 2. $[M]^0[L]^2[T]^{-1}$ 3. $[M][L]^{-3}[T]^0$ 4. $[M][L][T]^3$				
A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

116	170116	The compressor in Vapour compression is replaced by _____ in Absorption system	4.0	1.00
1. A generator, evaporator and a pump 2. An absorber, generator, a pump and pressure reducer valve 3. An absorber, evaporator, pump and throttle valve 4. An absorber and a pump				
A1 : 1 A2 : 2 A3 : 3 A4 : 4				

Objective Question

117	170117		4.0	1.00
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Refrigerant will be entering in super heated condition into_____

1. Evaporator
2. Compressor
3. Expansion valve
4. Receiver

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118	170118	Which of the following is the simplest method of cooling the condenser water?	4.0	1.00
1. Spray cooling pond 2. Cooling tower 3. Indirect air cooling 4. Hyperbolic cooling tower				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

119	170119	Which of the following qualities is <u>not</u> possessed by the filters in the air conditioning system?	4.0	1.00
1. They should be capable of removing dust particles from the incoming air 2. They should afford easy cleaning 3. They should offer low frictional resistance to the airflow 4. They should offer high frictional resistance to the airflow				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

120	170120		4.0	1.00
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The process of extraction of certain required amount of water from air is known as _____

1. Heating
2. Cooling
3. Humidification
4. Dehumidification

A1 : 1

A2 : 2

A3 : 3

A4 : 4