

## 37 Dairy Technology ICAR SEPT 2022

Topic:- GEN KNOW COMMON PHD

1) Colour of the tag used on certified seed bags is[Question ID = 16958][Question Description = 101\_221\_GKD\_SEP22\_Q01]

1. Blue [Option ID = 37829]
2. Purple [Option ID = 37830]
3. White [Option ID = 37831]
4. Golden Yellow [Option ID = 37832]

2) Following are the statements regarding the Usar soil -

- A. It is reclaimed by adding lime.
- B. This soil has pH more than seven.
- C. Paddy crop can be grown in this soil.

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

[Question ID = 16959][Question Description = 102\_221\_GKD\_SEP22\_Q02]

1. A and B only [Option ID = 37833]
2. B and C only [Option ID = 37834]
3. C only [Option ID = 37835]
4. A only [Option ID = 37836]

3) When total utility of a commodity increases, marginal utility will be

[Question ID = 16960][Question Description = 103\_221\_GKD\_SEP22\_Q03]

1. Negative but increasing  
[Option ID = 37837]
2. Positive but decreasing  
[Option ID = 37838]
3. Constant  
[Option ID = 37839]
4. Either positive or negative  
[Option ID = 37840]

4) Where is the headquarter of International Fund for Agriculture Development located?

[Question ID = 16961][Question Description = 104\_221\_GKD\_SEP22\_Q04]

1. Vienna, Austria  
[Option ID = 37841]
2. Rome, Italy  
[Option ID = 37842]
3. New York, USA  
[Option ID = 37843]
4. Berlin, Germany  
[Option ID = 37844]

5) Mid-Oceanic Ridges are one of the important divisions of the ocean floor. In this respect, point out the incorrect statement regarding the 'Mid-Oceanic Ridges'. [Question ID = 16962][Question Description = 105\_221\_GKD\_SEP22\_Q05]

1. It is the largest mountain chain on the surface of the earth [Option ID = 37845]
2. It is a series of interconnected chain within the ocean. [Option ID = 37846]
3. It is characterised by a central rift system [Option ID = 37847]
4. The rift system at the crest is the zone of very low volcanic activity. [Option ID = 37848]

6) Consider the following facts about the union territory of India and point out the one which is incorrect in relation to union territory. [Question ID = 16963][Question Description = 106\_221\_GKD\_SEP22\_Q06]

1. These are the areas under the direct control of central government. [Option ID = 37849]
2. Also known as the 'centrally administered territories. [Option ID = 37850]

3. These territories constitute a conspicuous departure from the unitary feature of India. [Option ID = 37851]
4. There is no uniformity in their administrative systems. [Option ID = 37852]

**7) Variety of flora and fauna are found in the different types of forest in India. In this regard, species of trees like teak, *sal shisham*, *sandalwood*, etc. are found in which of the following type of forests in India?**[Question ID = 16964][Question Description = 107\_221\_GKD\_SEP22\_Q07]

1. Tropical evergreen forests [Option ID = 37853]
2. Tropical thorn forests [Option ID = 37854]
3. Tropical deciduous forests [Option ID = 37855]
4. Montane forests [Option ID = 37856]

**8) The Marginal Preference Theory of consumption behaviour was proposed by**

**[Question ID = 16965][Question Description = 108\_221\_GKD\_SEP22\_Q08]**

1. Armstrong  
[Option ID = 37857]
2. J.K.Hicks  
[Option ID = 37858]
3. Neumann  
[Option ID = 37859]
4. Edmund Cannon  
[Option ID = 37860]

**9) Point out the incorrect statements regarding the service sector in India.**[Question ID = 16966][Question Description = 109\_221\_GKD\_SEP22\_Q09]

1. It is the highest contributor to GDP [Option ID = 37861]
2. It requires skilled labour [Option ID = 37862]
3. It is the fastest growing sector [Option ID = 37863]
4. It is restricted to very few sectors. [Option ID = 37864]

**10) Consider the statements regarding the agriculture sector in India and point out the incorrect statement.**[Question ID = 16967][Question Description = 110\_221\_GKD\_SEP22\_Q10]

1. Agriculture sector is the largest employer of workforce [Option ID = 37865]
2. It has contributed to the Gross Value Added (GVA) [Option ID = 37866]
3. Growth in allied sectors is the major drivers of overall growth in the sector. [Option ID = 37867]
4. Minimum Support Price (MSP) policy is used as to promote crop uniformity. [Option ID = 37868]

**11) In case of related goods, the cross elasticity of demand is**[Question ID = 16968][Question Description = 111\_221\_GKD\_SEP22\_Q11]

1. Low [Option ID = 37869]
2. High [Option ID = 37870]
3. Zero [Option ID = 37871]
4. Unity [Option ID = 37872]

**12) With reference to organic farming in India, consider the following statements :**

- A. The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.
- B. The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.
- C. Sikkim has become India's first fully organic state.

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

**[Question ID = 16969][Question Description = 112\_221\_GKD\_SEP22\_Q12]**

1. A and B only  
[Option ID = 37873]
2. B and C only  
[Option ID = 37874]
3. C only  
[Option ID = 37875]
4. A, B and C

[Option ID = 37876]

13) With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following falls under the Conservation Agriculture ?

- A. Avoiding the monoculture practices.
- B. Adopting minimum tillage.
- C. Avoiding the cultivation of plantation crops.
- D. Using crop residues to cover soil surface.
- E. Adopting spatial and temporal crop sequencing/ crop rotations.

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

[Question ID = 16970][Question Description = 113\_221\_GKD\_SEP22\_Q13]

- 1. A, C and D only [Option ID = 37877]
- 2. B, C, D and E only [Option ID = 37878]
- 3. B, D and E only [Option ID = 37879]
- 4. A, B, C and E only [Option ID = 37880]

14) Consumers are likely to get a variety of goods in which kind of market competition[Question ID = 16971][Question Description = 114\_221\_GKD\_SEP22\_Q14]

- 1. Monopoly [Option ID = 37881]
- 2. Duopoly [Option ID = 37882]
- 3. Oligopoly [Option ID = 37883]
- 4. Monopolistic [Option ID = 37884]

15) What is the correct chronological order of the following laws enacted for the conservation and protection of environment ?

- A. Environment (Protection) Act.
- B. Water (Prevention & Control of Pollution) Act.
- C. Air (Prevention & Control of pollution) Act.
- D. National Green Tribunal Act.

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

[Question ID = 16972][Question Description = 115\_221\_GKD\_SEP22\_Q15]

- 1. B, C, A, D [Option ID = 37885]
- 2. A, B, C, D [Option ID = 37886]
- 3. C, B, A, D [Option ID = 37887]
- 4. D, C, B, A [Option ID = 37888]

16) The scientific study of soil is[Question ID = 16973][Question Description = 116\_221\_GKD\_SEP22\_Q16]

- 1. Earth Study [Option ID = 37889]
- 2. Soil Science [Option ID = 37890]
- 3. Pedology [Option ID = 37891]
- 4. Soil Chemistry [Option ID = 37892]

17) *Triticum aestivum*, the common bread wheat is -

[Question ID = 16974][Question Description = 117\_221\_GKD\_SEP22\_Q17]

- 1. Tetraploid

[Option ID = 37893]

- 2. Hexaploid

[Option ID = 37894]

- 3. Haploid

[Option ID = 37895]

- 4. Diploid

[Option ID = 37896]

18) Sectoral inflation refers to[Question ID = 16975][Question Description = 118\_221\_GKD\_SEP22\_Q18]

- 1. Running inflation [Option ID = 37897]

2. Comprehensive inflation [Option ID = 37898]
3. Sporadic inflation [Option ID = 37899]
4. Creeping inflation [Option ID = 37900]

**19) Keynes Liquidity trap refers to[Question ID = 16976][Question Description = 119\_221\_GKD\_SEP22\_Q19]**

1. Speculative demand for money [Option ID = 37901]
2. Transactions motive of money is inelastic [Option ID = 37902]
3. Precautionary motive of money is inelastic [Option ID = 37903]
4. Transactions motive of money is constant [Option ID = 37904]

**20) A business is solvent if[Question ID = 16977][Question Description = 120\_221\_GKD\_SEP22\_Q20]**

1. Total receipts exceed total expenditures [Option ID = 37905]
2. Total debt exceeds total equity [Option ID = 37906]
3. Total sales exceed total cash expense [Option ID = 37907]
4. Total assets exceed total liabilities [Option ID = 37908]

Topic:- Dairy Sci n Dairy Tech Food Tech\_PHD

**1) Match List I with List II**

List I	List II
(Name of the cheese)	(Category of the cheese)
A. Cheddar	I. Acid coagulated cheese
B. Mozzarella	II. Whey cheese
C. Quarg	III. Hard cheese
D. Ricotta	IV. Pasta filata

Choose the correct answer from the options given below:

**[Question ID = 4451][Question Description = 101\_50\_DAI\_SEP22\_Q01]**

1. A - III, B - IV, C - II, D - I [Option ID = 17801]
2. A - III, B - IV, C - I, D - II [Option ID = 17802]
3. A - II, B - III, C - I, D - IV [Option ID = 17803]
4. A - I, B - II, C - III, D - IV [Option ID = 17804]

**2) Arrange the following membrane processes in the order of increasing pore size of the membranes used in these processes.**

- A. MF
- B. NF
- C. RO
- D. UF

Choose the *correct* answer from the options given below

**[Question ID = 4452][Question Description = 102\_50\_DAI\_SEP22\_Q02]**

1. A, B, C, D [Option ID = 17805]
2. D, C, B, A [Option ID = 17806]
3. A, D, B, C [Option ID = 17807]
4. A, D, C, B [Option ID = 17808]

**3) Human milk contains more \_\_\_\_\_ as compared to bovine milk.[Question ID = 4453][Question Description = 103\_50\_DAI\_SEP22\_Q03]**

1. whey proteins [Option ID = 17809]
2. B-Casein [Option ID = 17810]
3.  $\alpha_1$ -Casein [Option ID = 17811]
4.  $\kappa$ -Casein [Option ID = 17812]

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

**Assertion A:** Fat destabilization during ice cream freezing facilitates air cells stability

**Reason R:** Absorption of emulsifiers on the surface of fat globule membrane

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

**[Question ID = 4454][Question Description = 104\_50\_DAI\_SEP22\_Q04]**

1. Both A and R are correct and R is the correct explanation of A [Option ID = 17813]

2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 17814]
3. A is correct but R is not correct [Option ID = 17815]
4. A is not correct but R is correct [Option ID = 17816]

5) Maximum temperature to which milk particles are exposed during spray drying in the drying chamber is \_\_\_\_\_ degree celsius.

[Question ID = 4455][Question Description = 105\_50\_DAI\_SEP22\_Q05]

1. 40  
[Option ID = 17817]
2. 50  
[Option ID = 17818]
3. 60  
[Option ID = 17819]
4. 70  
[Option ID = 17820]

6) Use of fluidized bed drier for milk powders increases \_\_\_\_\_ [Question ID = 4456][Question Description = 106\_50\_DAI\_SEP22\_Q06]

1. Bulk density [Option ID = 17821]
2. Tapped density [Option ID = 17822]
3. Dispersibility [Option ID = 17823]
4. Scorched particle [Option ID = 17824]

7) \_\_\_\_\_ test is conducted to determine the Linear viscoelastic region of materials [Question ID = 4457]  
[Question Description = 107\_50\_DAI\_SEP22\_Q07]

1. Amplitude sweep [Option ID = 17825]
2. Frequency sweep [Option ID = 17826]
3. Dynamic sweep [Option ID = 17827]
4. Static sweep [Option ID = 17828]

8) Which of the following drying aids acts as wetting agents to promote water removal from foods? [Question ID = 4458]  
[Question Description = 108\_50\_DAI\_SEP22\_Q08]

1. Locust bean gum [Option ID = 17829]
2. Ethyl oleate [Option ID = 17830]
3. Xanthan gum [Option ID = 17831]
4. Methyl sulfonate [Option ID = 17832]

9) Which of the following tests is used to determine the mucosal adherence ability of probiotic organisms? [Question ID = 4459]  
[Question Description = 109\_50\_DAI\_SEP22\_Q09]

1. Acid tolerance test [Option ID = 17833]
2. Bile tolerance test [Option ID = 17834]
3. Cell surface hydrophobicity [Option ID = 17835]
4. Bile salt hydrolase activity [Option ID = 17836]

10) Sorption isotherms of most food products are in \_\_\_\_\_ shape [Question ID = 4460][Question Description = 110\_50\_DAI\_SEP22\_Q10]

1. Sigmoid [Option ID = 17837]
2. Parabolic [Option ID = 17838]
3. Elliptical [Option ID = 17839]
4. Decagonal [Option ID = 17840]

11) Which of the following is correct with regard to cocoa flavor?

- A. Caffeine and theobromine impart bitterness.
- B. Polyphenolic compounds impart astringency.
- C. Cocoa flavor precursors are involved in Maillard's reaction during the roasting of the cocoa beans.
- D. Solid fat index of cocoa butter also contributes to cocoa flavor.

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

[Question ID = 4461][Question Description = 111\_50\_DAI\_SEP22\_Q11]

1. A, B and D only [Option ID = 17841]

2. B and C only [Option ID = 17842]
3. A and D only [Option ID = 17843]
4. A, B and C only [Option ID = 17844]

12) Which of the following is the bitter compound present in bitter oranges?

[Question ID = 4462][Question Description = 112\_50\_DAI\_SEP22\_Q12]

1. Hesperidin (Hesperitin-7-rutinoside) [Option ID = 17845]
2. Neohesperidin (Eriodictyol-7-O-neohesperidoside) [Option ID = 17846]
3. Naringin (Naringenin-7-neohesperidoside) [Option ID = 17847]
4. Neohesperidin (Hesperetin-7-neohesperidoside) [Option ID = 17848]

13) To prevent the oxidation of beer, bottled beer should not contain more than \_\_\_\_\_ mg of oxygen per liter.

[Question ID = 4463][Question Description = 113\_50\_DAI\_SEP22\_Q13]

1. 0.5 [Option ID = 17849]
2. 1.0 [Option ID = 17850]
3. 5.0 [Option ID = 17851]
4. 0.1 [Option ID = 17852]

14) Match List I with List II

List I	List II
Property	Plastic packaging material
A. Excellent shrink property	I. EVOH
B. Excellent stretch property	II. PS
C. Excellent blister property	III. LDPE
D. Excellent oxygen barrier property	IV. PVC
	V. OPP

Choose the correct answer from the options given below:

[Question ID = 4464][Question Description = 114\_50\_DAI\_SEP22\_Q14]

1. A -II , B -V , C -I , D -III [Option ID = 17853]
2. A -V , B -III , C -IV , D -I [Option ID = 17854]
3. A -IV , B -I , C -V , D -II [Option ID = 17855]
4. A -III , B -IV , C -II , D -V [Option ID = 17856]

15) Which of the following treatments effectively prevents the sprouting of onions during long-term storage?

[Question ID = 4465][Question Description = 115\_50\_DAI\_SEP22\_Q15]

1. Curing [Option ID = 17857]
2. Waxing [Option ID = 17858]
3. Spraying maleic hydrazide [Option ID = 17859]
4. Dipping in the water containing calcium carbide [Option ID = 17860]

16) Given below are two statements:

Statement I: For parboiling of the rice, mostly long-grain cultivars of intermediate and high amylose contents are used.

Statement II: During the bread manufacture, reducing agents such as L-cysteine, glutathione, and sodium metabisulfite is added to strengthen the dough structure.

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

[Question ID = 4466][Question Description = 116\_50\_DAI\_SEP22\_Q16]

1. Both Statement I and Statement II are true [Option ID = 17861]
2. Both Statement I and Statement II are false [Option ID = 17862]
3. Statement I is true but Statement II is false [Option ID = 17863]
4. Statement I is false but Statement II is true [Option ID = 17864]

17) Read the following options related to chemically leavened bakery products.

- A. The dough formula of wafer and ice cream cone contains high sugar, essentially no fat, and a small amount of water.
- B. Cracking pattern on the surface of cookies is due to the crystallization of sugar at the surface that no longer holds water to give a moist and moldable surface and expansion of cookies due to leavening.
- C. The setting of cakes in the oven is partially due to the starch gelatinization and egg protein coagulation.
- D. The egg white is an important component of the angel cake formula wherein the eggs and sugar are whipped to a protein

foam, and then the flour is folded in carefully so as not to disrupt the foam.

E. Bread formulas usually contain surfactants to increase the bread's softness and shelf life.

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

[Question ID = 4467][Question Description = 117\_50\_DAI\_SEP22\_Q17]

1. A, B and D only [Option ID = 17865]
2. D and E only [Option ID = 17866]
3. A, B and C only [Option ID = 17867]
4. B, C, D and E only [Option ID = 17868]

18) Which of the following egg proteins binds riboflavin?

[Question ID = 4468][Question Description = 118\_50\_DAI\_SEP22\_Q18]

1. Ovomuroid [Option ID = 17869]
2. Flavoprotein [Option ID = 17870]
3. Avidin [Option ID = 17871]
4. Conalbumin [Option ID = 17872]

19) According to the Food Safety and Standards (Fortification of Foods) Regulations (2016), the level of vitamin D fortificant in fortified edible oil is between \_\_\_\_\_ (retinol equivalent, RE) per gram of oil.

[Question ID = 4469][Question Description = 119\_50\_DAI\_SEP22\_Q19]

1. 6 µg RE and 9.9 µg RE [Option ID = 17873]
2. 270 µg RE and 450 µg RE [Option ID = 17874]
3. 0.11 µg RE and 0.16 µg RE [Option ID = 17875]
4. 75 µg RE and 125 µg RE [Option ID = 17876]

20) Given below are two statements

Statement I: The type of recrystallization of ice crystals in which there is a change in surface shape or internal structure, usually resulting in a lower surface-area-to-volume ratio is called "accretive recrystallization".

Statement II: The type of recrystallization of ice crystals in which there is an increase in the average size and a reduction in the average number of crystals, caused by the growth of larger crystals at the expense of smaller crystals is called "Isomass recrystallization"

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

[Question ID = 4470][Question Description = 120\_50\_DAI\_SEP22\_Q20]

1. Both Statement I and Statement II are correct [Option ID = 17877]
2. Both Statement I and Statement II are incorrect [Option ID = 17878]
3. Statement I is correct but Statement II is incorrect [Option ID = 17879]
4. Statement I is incorrect but Statement II is correct [Option ID = 17880]

21) Food Borne illness that can be caused by a food service worker coughing or sneezing on food is

[Question ID = 4471][Question Description = 121\_50\_DAI\_SEP22\_Q21]

1. *Clostridium botulinum*

[Option ID = 17881]

2. *S. aureus*

[Option ID = 17882]

3. *E. coli*

[Option ID = 17883]

4. *Salmonella typhimurium*

[Option ID = 17884]

22) Pick the incorrect statement regarding drum drying[Question ID = 4472][Question Description = 122\_50\_DAI\_SEP22\_Q22]

1. Contact time 3 sec or less [Option ID = 17885]
2. Removal after  $\frac{3}{4}$  to  $\frac{7}{8}$  revolution [Option ID = 17886]
3. Drum clearance 0.5 to 1.0 mm [Option ID = 17887]
4. Steam economy 1.6 to 2.5 units [Option ID = 17888]

23) Which of the following membrane separation technique would be most suitable for partial desalination of whey in dairy industry?[Question ID = 4473][Question Description = 123\_50\_DAI\_SEP22\_Q23]

1. Reverse osmosis [Option ID = 17889]

2. Nano filtration [Option ID = 17890]
3. Ultra filtration [Option ID = 17891]
4. Membrane filtration [Option ID = 17892]

24) In a food processing plant, a brine solution is heated from - 12 degree Celsius to - 65 degree Celsius in a double pipe parallel flow heat exchanger by water entering at 35 degree Celsius and leaving at 20.5 degree Celsius. Let the rate of flow is 9 kg/min. Estimate the area of heat exchanger for an overall heat transfer coefficient of 860 W/m<sup>2</sup> K. For water  $c_p = 4.186 \times 10^3$  J/kg K [Question ID = 4474][Question Description = 124\_50\_DAI\_SEP22\_Q24]

1. 1.293 m<sup>2</sup> [Option ID = 17893]
2. 0.293 m<sup>2</sup> [Option ID = 17894]
3. 7.293 m<sup>2</sup> [Option ID = 17895]
4. 8.293 m<sup>2</sup> [Option ID = 17896]

25) A riveted joint does not fail by \_\_\_\_\_ of rivets.

- (I) Tearing
- (II) Shearing
- (III) Tearing of the plate across a row
- (IV) None of the above

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

[Question ID = 4475][Question Description = 125\_50\_DAI\_SEP22\_Q25]

1. (I), (II) and (III) [Option ID = 17897]
2. (I) and (II) only [Option ID = 17898]
3. (I) and (III) only [Option ID = 17899]
4. (IV) only [Option ID = 17900]

26) What is Air Conditioning?

- (I) Air Conditioning is the process of adding heat and increasing the humidity
- (II) Air Conditioning is the process of removing heat and controlling the humidity of air in a closed space
- (III) Air Conditioning is the process of controlling air moisture in an open area by adding heat

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

[Question ID = 4476][Question Description = 126\_50\_DAI\_SEP22\_Q26]

1. (I) and (III) only

[Option ID = 17901]

2. (I) only

[Option ID = 17902]

3. (III) only

[Option ID = 17903]

4. (II) only

[Option ID = 17904]

27) Solenoid Valve is a [Question ID = 4477][Question Description = 127\_50\_DAI\_SEP22\_Q27]

1. Sensor [Option ID = 17905]
2. Controller [Option ID = 17906]
3. Control Device [Option ID = 17907]
4. Comparator [Option ID = 17908]

28) Requirement of condenser can possibly be avoided by use of [Question ID = 4478][Question Description = 128\_50\_DAI\_SEP22\_Q28]

1. Multi effect evaporator [Option ID = 17909]
2. Preheaters [Option ID = 17910]
3. TVR [Option ID = 17911]
4. MVR [Option ID = 17912]

29) The separation limit for a membrane is determined by the lowest \_\_\_\_\_ that can be separated. [Question ID = 4479][Question Description = 129\_50\_DAI\_SEP22\_Q29]

1. Fractional weight [Option ID = 17913]
2. Molecular weight [Option ID = 17914]
3. Ion weight [Option ID = 17915]
4. Mass [Option ID = 17916]

30) Some examples of heat exchanger are



- (I) Condensers and evaporators in refrigeration units  
 (II) Evaporator of an ice plant and milk chiller of a pasteurizing plant  
 (III) Automobile radiators and oil coolers of heat engines

Identify the correct answer

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

[Question ID = 4480][Question Description = 130\_50\_DAI\_SEP22\_Q30]

1. (I), (II) and (III) [Option ID = 17917]
2. (I) and (II) only [Option ID = 17918]
3. (I) and (III) only [Option ID = 17919]
4. (II) and (III) only [Option ID = 17920]

31) Match List I with List II

Laws	Physical properties
A. Raoult's Law	I. Electrode potential
B. Stokes law	II. Equivalent conductance
C. Kohlrausch's Law	III. Scattering of light by colloidal solution
D. Nernst equation	IV. Creaming phenomenon
	V. Vapour pressure of solution

Choose the correct answer from the options given below:

[Question ID = 4481][Question Description = 131\_50\_DAI\_SEP22\_Q31]

1. A - V, B - IV, C - II, D - I [Option ID = 17921]
2. A - V, B - IV, C - III, D - I [Option ID = 17922]
3. A - II, B - IV, C - V, D - I [Option ID = 17923]
4. A - II, B - III, C - V, D - I [Option ID = 17924]

32) \_\_\_\_\_ is used to estimate the fat content in cream

[Question ID = 4482][Question Description = 132\_50\_DAI\_SEP22\_Q32]

1. Stalagnometer [Option ID = 17925]
2. Butyrometer [Option ID = 17926]
3. Butyro-refractometer [Option ID = 17927]
4. Pycnometer [Option ID = 17928]

33) Triacylglycerols of milk fat can crystallize predominantly in \_\_\_\_\_ polymorphic forms [Question ID = 4483][Question Description = 133\_50\_DAI\_SEP22\_Q33]

1.  $\alpha$  [Option ID = 17929]
2.  $\alpha'$  [Option ID = 17930]
3.  $\beta$  [Option ID = 17931]
4.  $\beta'$  [Option ID = 17932]

34) Read the following statements about cow's milk allergy (CMA)

- A. CMA is an inflammatory response to milk proteins.
- B. It is distinct from lactose intolerance.
- C. CMA is more prevalent in infants than in adults.
- D. The dominant immunological mechanisms driving allergic reactions change with age.
- E. Non-IgE-mediated reactions common in infancy and IgE-mediated reactions dominating in adults.

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

[Question ID = 4484][Question Description = 134\_50\_DAI\_SEP22\_Q34]

1. A, B, C and D only [Option ID = 17933]
2. A, B, C and E only [Option ID = 17934]
3. B, C, D and E only [Option ID = 17935]
4. C, D and E only [Option ID = 17936]

35) Hehner test is used for detection of \_\_\_\_\_ in milk [Question ID = 4485][Question Description = 135\_50\_DAI\_SEP22\_Q35]

1. Hydrogen peroxide [Option ID = 17937]
2. Sodium chloride [Option ID = 17938]
3. Formalin [Option ID = 17939]
4. Anionic detergent [Option ID = 17940]

36) Given below are two statements

Statement I: Flame photometer is very useful to detect the alkali and alkaline earth metals from the colour of the flame.

Statement II: Flame photometer is used in analysis for the determination of Na, K, Ca & Fe in biological samples.

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

[Question ID = 4486][Question Description = 136\_50\_DAI\_SEP22\_Q36]

1. Both Statement I and Statement II are true [Option ID = 17941]
2. Both Statement I and Statement II are false [Option ID = 17942]
3. Statement I is true but Statement II is false [Option ID = 17943]
4. Statement I is false but Statement II is true [Option ID = 17944]

37) In  $500 \times g$ , what does this represent in accordance to centrifugation?[Question ID = 4487][Question Description = 137\_50\_DAI\_SEP22\_Q37]

1. Gravitational force [Option ID = 17945]
2. Centrifugal force is 500 times greater than earthly gravitational force [Option ID = 17946]
3. Centrifugal force is 500 times less than earthly gravitational force [Option ID = 17947]
4. It is the same as the speed of the rotor in rpm [Option ID = 17948]

38) Tandem mass spectroscopy combines which of the following devices?[Question ID = 4488][Question Description = 138\_50\_DAI\_SEP22\_Q38]

1. Mass spectrometer and gas-solid chromatography [Option ID = 17949]
2. Mass spectrometer and gas-liquid chromatography [Option ID = 17950]
3. Mass spectrometer and liquid chromatography [Option ID = 17951]
4. Mass spectrometer and Mass spectrometer [Option ID = 17952]

39) What is correct statement about accuracy in analytical measurement?

[Question ID = 4489][Question Description = 139\_50\_DAI\_SEP22\_Q39]

1. A measure of how often an experimental value can be repeated [Option ID = 17953]
2. The number of significant figures used in a measurement [Option ID = 17954]
3. The closeness of a measured value to the real value [Option ID = 17955]
4. It represents degree of reproducibility [Option ID = 17956]

40) How many acts were merged to enact Food Safety and Standards Act, 2006

[Question ID = 4490][Question Description = 140\_50\_DAI\_SEP22\_Q40]

1. 6 [Option ID = 17957]
2. 7 [Option ID = 17958]
3. 5 [Option ID = 17959]
4. 9 [Option ID = 17960]

41) Ingestion of performed toxin in food give rise to

[Question ID = 4491][Question Description = 141\_50\_DAI\_SEP22\_Q41]

1. Food infection  
[Option ID = 17961]
2. Food intoxication  
[Option ID = 17962]
3. Food toxico-infection  
[Option ID = 17963]
4. Food Allergy  
[Option ID = 17964]

42) Which of the following bacteria belongs to coliforms entering through fecal contamination?[Question ID = 4492]

[Question Description = 142\_50\_DAI\_SEP22\_Q42]

1. *Escherichia coli* [Option ID = 17965]
2. *Enterobacter aerogenes* [Option ID = 17966]
3. *Salmonella* [Option ID = 17967]
4. *Shigella* [Option ID = 17968]

43) Which of the following bacteria are known to be food intoxicants?

- A. *Staphylococcus aureus*
- B. *Listeria monocytogenes*

C. *Clostridium botulinum*

D. *Salmonella* species

Choose the *correct* answer from the options given below

[Question ID = 4493][Question Description = 143\_50\_DAI\_SEP22\_Q43]

1. A and B [Option ID = 17969]
2. A and C [Option ID = 17970]
3. C and D [Option ID = 17971]
4. B and D [Option ID = 17972]

44) Arrange following fatty acids, in descending order of relative rate of oxidations

A. Stearic acid

B. Oleic acid

C. Linoleic acid

D. Linolenic acid

Choose the *correct* answer from the options given below

[Question ID = 4494][Question Description = 144\_50\_DAI\_SEP22\_Q44]

1. B, D, C, A [Option ID = 17973]
2. D,C,B, A [Option ID = 17974]
3. D,C, A, B [Option ID = 17975]
4. C, D, B, A [Option ID = 17976]

45) What is the correct ascending order of rays with respect to their wavelength

A. Gamma

B. Visible

C. Microwave

D. X rays

E. Radiowaves

Choose the *correct* answer from the options given below

[Question ID = 4495][Question Description = 145\_50\_DAI\_SEP22\_Q45]

1. E, C, A, B, D [Option ID = 17977]
2. E, C, B, D, A [Option ID = 17978]
3. E, C, D, A, B [Option ID = 17979]
4. E, D, C, B, A [Option ID = 17980]

46) Match List I with List II

List I	List II
Bacterial pathogens	Selective plating medium
A. <i>Bacillus cereus</i>	I. Xylose lysine deoxycholate citrate agar
B. <i>Listeria monocytogenes</i>	II. Baird Parker agar
C. <i>Staphylococcus aureus</i>	III. Mannitol egg yolk polymyxin agar
D. <i>Salmonella</i>	IV. PALCAM agar
	V. VRBA

Choose the correct answer from the options given below:

[Question ID = 4496][Question Description = 146\_50\_DAI\_SEP22\_Q46]

1. A - I, B - II, C - III, D - IV [Option ID = 17981]
2. A -III, B - IV, C - II, D - I [Option ID = 17982]
3. A-II, B - III, C - IV, D - V [Option ID = 17983]
4. A - V, B - IV, C -III, D - I [Option ID = 17984]

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

Assertion A: Khoa and khoa-based sweets are more prone to *Staphylococcus aureus* contamination and food poisoning problems

Reason R: Human handlers are directly involved in the preparation of khoa and khoa-based sweets

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

[Question ID = 4497][Question Description = 147\_50\_DAI\_SEP22\_Q47]

- Both A and R are true and R is the correct explanation of A  
[Option ID = 17985]
- Both A and R are true but R is NOT the correct explanation of A  
[Option ID = 17986]
- A is true but R is false  
[Option ID = 17987]
- A is false but R is true  
[Option ID = 17988]

48) Given below are two statements

Statement I: Clean milk is not always safe for consumption

Statement II: Milk is a carrier of potentially pathogenic bacteria

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

[Question ID = 4498][Question Description = 148\_50\_DAI\_SEP22\_Q48]

- Both Statement I and Statement II are correct [Option ID = 17989]
- Both Statement I and Statement II are incorrect [Option ID = 17990]
- Statement I is correct but Statement II is incorrect [Option ID = 17991]
- Statement I is incorrect but Statement II is correct [Option ID = 17992]

49) The enzyme responsible for bitty cream defects in cream [Question ID = 4499][Question Description = 149\_50\_DAI\_SEP22\_Q49]

- Phospholipase [Option ID = 17993]
- Lipase [Option ID = 17994]
- Esterase [Option ID = 17995]
- Proteases [Option ID = 17996]

50) What are the IMViC test results for *E.coli*? [Question ID = 4500][Question Description = 150\_50\_DAI\_SEP22\_Q50]

- +++ [Option ID = 17997]
- + [Option ID = 17998]
- + [Option ID = 17999]
- +++ [Option ID = 18000]

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1) Glycomacropptide formed after rennet action on milk proteins consist of \_\_\_\_\_ amino acids chain. [Question ID = 4701][Question Description = 101\_46\_DAT\_SEP22\_Q01]

- 106-169 [Option ID = 18801]
- 105-169 [Option ID = 18802]
- 1-105 [Option ID = 18803]
- 1-106 [Option ID = 18804]

2) During cheese ripening, intermediate sized peptides are proteolysed to shorter peptides by \_\_\_\_\_. [Question ID = 4702][Question Description = 102\_46\_DAT\_SEP22\_Q02]

- Proteinases [Option ID = 18805]
- Peptidases [Option ID = 18806]
- Chymosin [Option ID = 18807]
- Trypsin [Option ID = 18808]

3) Fat destabilization to a certain extent is essential during ice cream freezing for \_\_\_\_\_. [Question ID = 4703][Question Description = 103\_46\_DAT\_SEP22\_Q03]

- Retention of incorporated air [Option ID = 18809]
- Preparing a wet ice cream [Option ID = 18810]
- Decreasing the meltdown rate [Option ID = 18811]
- Decreasing overrun [Option ID = 18812]

4) \_\_\_\_\_ is a microbial stabilizer used in ice cream. [Question ID = 4704][Question Description = 104\_46\_DAT\_SEP22\_Q04]

- Xanthan gum [Option ID = 18813]
- Guar gum [Option ID = 18814]

3. Locust bean gum [Option ID = 18815]
4. kappa carageenan [Option ID = 18816]

5) Sesquecarbonate is a mixture of \_\_\_\_\_ and \_\_\_\_\_

[Question ID = 4705][Question Description = 105\_46\_DAT\_SEP22\_Q05]

1. Bicarbonate and hydroxide [Option ID = 18817]
2. Sodium carbonate and sodium hydroxide [Option ID = 18818]
3. Baking soda and soda ash [Option ID = 18819]
4. Sodium carbonate and magnesium hydroxide [Option ID = 18820]

6) Which of the following polymorphic crystal form of fat is ideal for spreads and margarine?

[Question ID = 4706][Question Description = 106\_46\_DAT\_SEP22\_Q06]

1. Alpha [Option ID = 18821]
2. Beta [Option ID = 18822]
3. Beta prime [Option ID = 18823]
4. Sub alpha [Option ID = 18824]

7) Which of the following membrane processes is known as clarification process?[Question ID = 4707][Question Description = 107\_46\_DAT\_SEP22\_Q07]

1. Reverse osmosis [Option ID = 18825]
2. Nanofiltration [Option ID = 18826]
3. Ultrafiltration [Option ID = 18827]
4. Microfiltration [Option ID = 18828]

8) \_\_\_\_\_ method of air circulation during drying results in higher thermal efficiency.

[Question ID = 4708][Question Description = 108\_46\_DAT\_SEP22\_Q08]

1. Co-current [Option ID = 18829]
2. Counter current [Option ID = 18830]
3. Combined current [Option ID = 18831]
4. Both Co-current and Counter current [Option ID = 18832]

9) Glass transition temperature of ice cream mix can be achieved if the ice cream mix is frozen through\_\_\_\_\_

[Question ID = 4709][Question Description = 109\_46\_DAT\_SEP22\_Q09]

1. Batch freezing [Option ID = 18833]
2. Continuous freezing [Option ID = 18834]
3. Cryogenic freezing [Option ID = 18835]
4. Static freezing [Option ID = 18836]

10) \_\_\_\_\_ is a lipase based detergent that can be used as a biodetergent in dairy industries.[Question ID = 4710][Question Description = 110\_46\_DAT\_SEP22\_Q10]

1. Lumafast [Option ID = 18837]
2. Purafect [Option ID = 18838]
3. Protosol [Option ID = 18839]
4. Maxamyl [Option ID = 18840]

11) High pressure processing of milk results in \_\_\_\_\_[Question ID = 4711][Question Description = 111\_46\_DAT\_SEP22\_Q11]

1. casein micelle disintegration [Option ID = 18841]
2. decrease in viscosity [Option ID = 18842]
3. increase in milk turbidity [Option ID = 18843]
4. increase in size of casein micelle [Option ID = 18844]

12) Which component of human milk oligosaccharide (HMO) is related to brain development in infants?[Question ID = 4712][Question Description = 112\_46\_DAT\_SEP22\_Q12]

1. Fucose [Option ID = 18845]
2. GOS [Option ID = 18846]
3. Sialic acid [Option ID = 18847]
4. FOS [Option ID = 18848]

13) Acid CIP is required for removing the deposits of \_\_\_\_\_[Question ID = 4713][Question Description = 113\_46\_DAT\_SEP22\_Q13]

1. Fat and salts [Option ID = 18849]
2. Proteins and salts [Option ID = 18850]

3. Fat and proteins [Option ID = 18851]
4. Fat [Option ID = 18852]

**14) Which of the following packaging material has high water barrier property?**[Question ID = 4714][Question Description = 114\_46\_DAT\_SEP22\_Q14]

1. Aluminium foil [Option ID = 18853]
2. Polyethylene [Option ID = 18854]
3. Polypropylene [Option ID = 18855]
4. Polystyrene [Option ID = 18856]

**15) The melting point of polyvinylidene chloride is about \_\_\_\_\_ °C**[Question ID = 4715][Question Description = 115\_46\_DAT\_SEP22\_Q15]

1. 60 [Option ID = 18857]
2. 100 [Option ID = 18858]
3. 150 [Option ID = 18859]
4. 200 [Option ID = 18860]

**16) \_\_\_\_\_ is known to be a relatively new technique to prepare starch based biodegradable materials.** [Question ID = 4716][Question Description = 116\_46\_DAT\_SEP22\_Q16]

1. Film casting [Option ID = 18861]
2. Extrusion processing [Option ID = 18862]
3. Electrospinning [Option ID = 18863]
4. Foaming processing [Option ID = 18864]

**17) Which of the following is NOT a characteristic of Active Packaging?**

[Question ID = 4717][Question Description = 117\_46\_DAT\_SEP22\_Q17]

1. Antimicrobial [Option ID = 18865]
2. Antioxidant [Option ID = 18866]
3. Gas leakage indication [Option ID = 18867]
4. Oxygen scavenging [Option ID = 18868]

**18) \_\_\_\_\_ is a characteristic of polylactic acid (PLA) which limits its application in food packaging.**[Question ID = 4718][Question Description = 118\_46\_DAT\_SEP22\_Q18]

1. Less polarity [Option ID = 18869]
2. Poor heat resistance [Option ID = 18870]
3. Less brittleness [Option ID = 18871]
4. Low density [Option ID = 18872]

**19) Which of the following packaging material is stable over a wide range of temperatures?**[Question ID = 4719][Question Description = 119\_46\_DAT\_SEP22\_Q19]

1. PET [Option ID = 18873]
2. PVC [Option ID = 18874]
3. PP [Option ID = 18875]
4. HDPE [Option ID = 18876]

**20) The most predominant crystals form of  $\alpha$ -lactose is \_\_\_\_\_**[Question ID = 4720][Question Description = 120\_46\_DAT\_SEP22\_Q20]

1. Prism [Option ID = 18877]
2. Tomahawk [Option ID = 18878]
3. Pyramid [Option ID = 18879]
4. Tetrahedron [Option ID = 18880]

**21) Which of the following membrane processes is also known as “ loose RO”?**[Question ID = 4721][Question Description = 121\_46\_DAT\_SEP22\_Q21]

1. Microfiltration [Option ID = 18881]
2. Diafiltration [Option ID = 18882]
3. Nanofiltration [Option ID = 18883]
4. Ultrafiltration [Option ID = 18884]

**22) The Sherwood number (Sh) (also called the mass transfer Nusselt number), a dimensionless number used in mass-transfer operation, represents the ratio of \_\_\_\_\_**

[Question ID = 4722][Question Description = 122\_46\_DAT\_SEP22\_Q22]

1. the molecular mass transfer to the convective mass transfer [Option ID = 18885]
2. the convective mass transfer to the rate of diffusive mass transport [Option ID = 18886]

3. the loss of velocity to that of the loss of turbulence [Option ID = 18887]
4. the momentum transfer to the mass transfer [Option ID = 18888]

**23) Extended shelf life milk is produced using \_\_\_\_\_ membrane filtration process.**[Question ID = 4723][Question Description = 123\_46\_DAT\_SEP22\_Q23]

1. Microfiltration [Option ID = 18889]
2. Nanofiltration [Option ID = 18890]
3. Ultrafiltration [Option ID = 18891]
4. Reverse osmosis [Option ID = 18892]

**24) Resistance of Thin Film Composite membrane to chlorine is \_\_\_\_\_**[Question ID = 4724][Question Description = 124\_46\_DAT\_SEP22\_Q24]

1. Excellent [Option ID = 18893]
2. Good [Option ID = 18894]
3. Fair [Option ID = 18895]
4. Poor [Option ID = 18896]

**25) Which of the following statement is False?**

[Question ID = 4725][Question Description = 125\_46\_DAT\_SEP22\_Q25]

1. Emulsifiers are added in ice-cream for de-emulsification  
[Option ID = 18897]
2. Fat destabilization to a limited extent is essential in ice-cream  
[Option ID = 18898]
3. Emulsifiers are added in ice-cream to produce drier ice-cream  
[Option ID = 18899]
4. Emulsifiers are added in ice-cream to prevent fat destabilization  
[Option ID = 18900]

**26) Viscosity of a composite fluid is given by \_\_\_\_\_**

[Question ID = 4726][Question Description = 126\_46\_DAT\_SEP22\_Q26]

1.  $\eta_s = \eta_o$   
(1 + 0.25  $\phi$ ) [Option ID = 18901]
2.  $\eta_o = \eta_s$   
(1 + 2.5  $\phi$ ) [Option ID = 18902]
3.  $\eta_o = \eta_s$   
(1 + 0.25  $\phi$ ) [Option ID = 18903]
4.  $\eta_s = \eta_o$   
(1 + 2.5  $\phi$ ) [Option ID = 18904]

**27) Milk at high temperature behaves as \_\_\_\_\_ fluid.**

[Question ID = 4727][Question Description = 127\_46\_DAT\_SEP22\_Q27]

1. Newtonian [Option ID = 18905]
2. Rheopectic [Option ID = 18906]
3. Thixotropic [Option ID = 18907]
4. Viscoplastic [Option ID = 18908]

**28) End effects are the common source of error in \_\_\_\_\_ viscometers**[Question ID = 4728][Question Description = 128\_46\_DAT\_SEP22\_Q28]

1. Orifice [Option ID = 18909]
2. Rotational [Option ID = 18910]
3. Extrusion [Option ID = 18911]
4. Capillary [Option ID = 18912]

**29) Skim milk concentrate with high WPNI will have relatively \_\_\_\_\_ viscosity as compared to skim milk having low WPNI**[Question ID = 4729][Question Description = 129\_46\_DAT\_SEP22\_Q29]

1. high [Option ID = 18913]
2. similar [Option ID = 18914]
3. low [Option ID = 18915]
4. equal [Option ID = 18916]

**30) What is the full form of FOSHU?**

[Question ID = 4730][Question Description = 130\_46\_DAT\_SEP22\_Q30]

1. Food for specified health uses

[Option ID = 18917]

2. Food for space and home uses

[Option ID = 18918]

3. Food and organisms for specified health uses

[Option ID = 18919]

4. Food for specific human uses

[Option ID = 18920]

**31) Milk Fat Globule membrane imparts \_\_\_\_\_ characteristic to butter**

[Question ID = 4731][Question Description = 131\_46\_DAT\_SEP22\_Q31]

1. Elastic [Option ID = 18921]

2. Plastic [Option ID = 18922]

3. Viscous [Option ID = 18923]

4. No effect [Option ID = 18924]

**32) Which of the following is the fundamental rheological property of a food material:**

[Question ID = 4732][Question Description = 132\_46\_DAT\_SEP22\_Q32]

1. Hardness [Option ID = 18925]

2. Cohesiveness [Option ID = 18926]

3. Springiness [Option ID = 18927]

4. Fracture stress [Option ID = 18928]

**33) The mechanical analogue of viscous behaviour is \_\_\_\_\_ [Question ID = 4733][Question Description = 133\_46\_DAT\_SEP22\_Q33]**

1. Dashpot [Option ID = 18929]

2. Spring [Option ID = 18930]

3. Friction block [Option ID = 18931]

4. Scissor [Option ID = 18932]

**34) Materials exhibiting yield stress are rheologically categorized as \_\_\_\_\_ [Question ID = 4734][Question Description = 134\_46\_DAT\_SEP22\_Q34]**

1. Newtonian [Option ID = 18933]

2. Elastic [Option ID = 18934]

3. Plastic [Option ID = 18935]

4. Dilatant [Option ID = 18936]

**35) High fat cream is a \_\_\_\_\_ kind of emulsion [Question ID = 4735][Question Description = 135\_46\_DAT\_SEP22\_Q35]**

1. Oil in water [Option ID = 18937]

2. Water in oil [Option ID = 18938]

3. Gas in water [Option ID = 18939]

4. Foam [Option ID = 18940]

**36) Which of the physical structures is NOT present in ice cream mix?**

[Question ID = 4736][Question Description = 136\_46\_DAT\_SEP22\_Q36]

1. Solution [Option ID = 18941]

2. Foam [Option ID = 18942]

3. Colloidal dispersion [Option ID = 18943]

4. Emulsion [Option ID = 18944]

**37) Which of the following is NOT a plant based high intensity sweetener?**

[Question ID = 4737][Question Description = 137\_46\_DAT\_SEP22\_Q37]

1. Katemfe [Option ID = 18945]

2. Licorice [Option ID = 18946]

3. Stevia [Option ID = 18947]

4. Valerian [Option ID = 18948]



38) As per FSSAI, what is the maximum permissible quantity (m/m) of nisin in canned rasogolla \_\_\_\_\_

[Question ID = 4738][Question Description = 138\_46\_DAT\_SEP22\_Q38]

1. 25 ppm

[Option ID = 18949]

2. 5 ppm

[Option ID = 18950]

3. 2.5 ppm

[Option ID = 18951]

4. 50 ppm

[Option ID = 18952]

39) As per FSSAI, what is the maximum permissible limit of Aspartame in Burfi \_\_\_\_\_ [Question ID = 4739][Question Description = 139\_46\_DAT\_SEP22\_Q39]

1. 100 ppm [Option ID = 18953]

2. 200 ppm [Option ID = 18954]

3. 300 ppm [Option ID = 18955]

4. 500 ppm [Option ID = 18956]

40) The Moisture content and yield of chhanna made with calcium lactate are usually

[Question ID = 4740][Question Description = 140\_46\_DAT\_SEP22\_Q40]

1. 55-58% and 24-25%

[Option ID = 18957]

2. 65-67% and 24-25%

[Option ID = 18958]

3. 65-67% and 17-18%

[Option ID = 18959]

4. 55-58% and 17-18%

[Option ID = 18960]

41) Which fraction of casein micelle possesses comparatively higher emulsifying property? [Question ID = 4741][Question Description = 141\_46\_DAT\_SEP22\_Q41]

1.  $\alpha$ s1-casein [Option ID = 18961]

2.  $\alpha$ s2-casein [Option ID = 18962]

3. K-casein [Option ID = 18963]

4.  $\beta$ -casein [Option ID = 18964]

42) Which of the following secondary stabilizers is used to prevent whey separation in ice cream? [Question ID = 4742]

[Question Description = 142\_46\_DAT\_SEP22\_Q42]

1. k-carrageenan [Option ID = 18965]

2. Guar gum [Option ID = 18966]

3. Locust bean gum [Option ID = 18967]

4. Sodium alginate [Option ID = 18968]

43) Which kind of emulsion is used to encapsulate beta carotene for its supplementation in low-fat spread with highest stability

[Question ID = 4743][Question Description = 143\_46\_DAT\_SEP22\_Q43]

1. Water-in-oil-in-water [Option ID = 18969]

2. Oil-in-water-in-oil [Option ID = 18970]

3. Water-in-oil [Option ID = 18971]

4. Oil-in-water [Option ID = 18972]

44) Product certification is mandatory requirement for milk powder

[Question ID = 4744][Question Description = 144\_46\_DAT\_SEP22\_Q44]

1. Either FSSAI or BIS

[Option ID = 18973]

2. BIS only

[Option ID = 18974]

3. FSSAI and BIS Both

[Option ID = 18975]

4. FSSAI only

[Option ID = 18976]

**45) Which of the following is a HACCP principle for a food processing industry?**

[Question ID = 4745][Question Description = 145\_46\_DAT\_SEP22\_Q45]

1. Establish a perimeter around the food factory

[Option ID = 18977]

2. Establish a critical control point for the food process operation

[Option ID = 18978]

3. Conduct proximate composition analysis of the product

[Option ID = 18979]

4. Maintain record of sales of other industries

[Option ID = 18980]

**46) Among the following, which is NOT a desirable attribute of hydrogel?**

[Question ID = 4746][Question Description = 146\_46\_DAT\_SEP22\_Q46]

1. Formation of polymeric structure [Option ID = 18981]

2. Water retention [Option ID = 18982]

3. Easily dissolving in water [Option ID = 18983]

4. Swelling [Option ID = 18984]

**47) For preapration of a water-in-oil emulsion, the HLB value of an emulsifer should be \_\_\_\_\_[Question ID = 4747]**

[Question Description = 147\_46\_DAT\_SEP22\_Q47]

1. 3 to 6 [Option ID = 18985]

2. 8 to 18 [Option ID = 18986]

3. 13 to 15 [Option ID = 18987]

4. 15 to 20 [Option ID = 18988]

**48) Which of the following criterion is NOT used to establish probiotic potential of bacteria?**

[Question ID = 4748][Question Description = 148\_46\_DAT\_SEP22\_Q48]

1. Acid tolerance [Option ID = 18989]

2. Bile tolerance [Option ID = 18990]

3. Cell surface hydrophobicity [Option ID = 18991]

4. Count of min 8 log CFU/ml org of product [Option ID = 18992]

**49) Substances that helps in promoting the growth of probiotic organisms are called \_\_\_\_\_**

[Question ID = 4749][Question Description = 149\_46\_DAT\_SEP22\_Q49]

1. Prebiotics [Option ID = 18993]

2. Postbiotics [Option ID = 18994]

3. Synbiotics [Option ID = 18995]

4. Xenobiotics [Option ID = 18996]

**50) Which of the following milk product contains milk protein co-precipitates?**

[Question ID = 4750][Question Description = 150\_46\_DAT\_SEP22\_Q50]

1. Cheddar cheese [Option ID = 18997]

2. Gouda cheese [Option ID = 18998]

3. Cream cheese [Option ID = 18999]

4. Paneer [Option ID = 19000]