

PROVISIONAL ANSWER KEY

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Alphacode	A

Question1:-Roughage feeding improved the concentration of _____ in milk.

- A:-Casein
- B:-Fat
- C:-Lactose
- D:-Fibre

Correct Answer:- Option-B

Question2:-The protein essential for the mammary synthesis of lactose is

- A:-Beta-Casein
- B:-Alfa-Casein
- C:-Beta-Lactoglobulin
- D:-Alfa-Lactalbumin

Correct Answer:- Option-D

Question3:-The milk protein most susceptible to plasmin action is

- A:-Beta-Casein
- B:-Alfa-S1-Casein
- C:-Alfa-S2-Casein
- D:-Kapa-Casein

Correct Answer:- Option-A

Question4:-MFGM is rich source of enzyme

- A:-Catalase
- B:-Lipase
- C:-Xanthine oxidase
- D:-Glucokinase

Correct Answer:- Option-C

Question5:-The fraction of casein which is hydrophilic and most soluble in water

- A:-Beta-Casein
- B:-Alfa-S1-Casein
- C:-Alfa-S2-Casein
- D:-Kapa-Casein

Correct Answer:- Option-D

Question6:-The specific gravity of milk fat is

- A:-1.023
- B:-1.032
- C:-0.093
- D:-0.93

Correct Answer:- Option-D

Question7:-White colour of milk is due to

- A:-Casein
- B:-Fat globules
- C:-Both 1 and 2
- D:-Carotenoids

Correct Answer:- Option-C

Question8:-Pycnometer is used to determine

- A:-Density
- B:-Viscosity
- C:-Surface tension
- D:-Temperature

Correct Answer:- Option-A

Question9:-Specific rotation of alfa-lactose monohydrate is

A:-+35.5°

B:-+35.0°

C:-+89.0°

D:-+89.4°

Correct Answer:- Option-D

Question10:-Enzyme in milk used as indices for the mastitic infection of animal is

A:-Plasmin

B:-Lactoperoxidase

C:-Catalase

D:-Alkaline phosphatase

Correct Answer:- Option-C

Question11:-C-terminal amino acid residue of beta-casein is

A:-Valine

B:-Arginine

C:-Proline

D:-Lysine

Correct Answer:- Option-A

Question12:-The lactose concentration is inversely proportional to _____ content of milk.

A:-Fat

B:-Phospholipid

C:-Glucose

D:-Ash

Correct Answer:- Option-D

Question13:-Milk is an excellent source of

A:-Calcium

B:-Phosphorous

C:-Riboflavin

D:-All of the above (1), (2), and (3)

Correct Answer:- Option-D

Question14:-The principal kind of immunoglobulin found in bovine milk is

A:-IgG1

B:-IgG2

C:-IgA

D:-IgM

Correct Answer:- Option-A

Question15:-Cystine to methionine ratio in human milk is

A:-2:1

B:-1:2

C:-1:1

D:-2:3

Correct Answer:- Option-A

Question16:-Lactulose is a disaccharide of

A:-Glucose and fructose

B:-Glucose and galactose

C:-Galactose and fructose

D:-Glucose and maltose

Correct Answer:- Option-C

Question17:-Which of the following is not a fat constant ?

A:-Pyne's constant

B:-Saponification value

C:-Iodine value

D:-Refractive index

Correct Answer:- Option-A

Question18:-The characteristic fatty acid of milk fat is

A:-Oleic acid

B:-Palmetic acid

C:-Butyric acid

D:-Capric acid

Correct Answer:- Option-C

Question19:-Heat stability of unconcentrated milk is tested at _____ temperature.

- A:-100°C
- B:-120°C
- C:-130°C
- D:-140°C

Correct Answer:- Option-D

Question20:-Gluconic acid delta lactone is used in the preparation of

- A:-Cheddar cheese
- B:-Mozzarella cheese
- C:-Parmigiano cheese
- D:-Swiss cheese

Correct Answer:- Option-B

Question21:-The synthetic antioxidant permitted in ghee as per FSSAI

- A:-BHA
- B:-BHT
- C:-TBHQ
- D:-None

Correct Answer:- Option-D

Question22:-As per FSSAI, Skim milk powder should not contain more than _____ % moisture.

- A:-0.5
- B:-1.0
- C:-1.5
- D:-5.0

Correct Answer:- Option-D

Question23:-The acidity of ice cream is expressed in terms of

- A:-Percentage lactic acid
- B:-Percentage acetic acid
- C:-Percentage citric acid
- D:-Percentage oleic acid

Correct Answer:- Option-A

Question24:-Typical flavor of butter from ripened cream is

- A:-Lactone
- B:-Acetone
- C:-Diacetyl
- D:-Acetaldehyde

Correct Answer:- Option-C

Question25:-Lactose exist in milk powder as

- A:-Lactose glass
- B:-Alfa lactose mono hydrate
- C:-Anhydrous beta lactose
- D:-Both (2) and (3)

Correct Answer:- Option-A

Question26:-As per BIS method, while calibrating the butyrometer, the mercury pipette dispenses exactly _____ ml mercury which fills up the tube corresponding to 2.5% fat graduation limits.

- A:-0.625
- B:-0.500
- C:-0.175
- D:-0.3125

Correct Answer:- Option-D

Question27:-To prepare 1N NaOH _____ of NaOH needs to be dissolved in 100 ml of water.

- A:-4 g
- B:-40 g
- C:-20 g
- D:-2 g

Correct Answer:- Option-A

Question28:-_____ works on the Archimedes' principle.

- A:-Polarimeter
- B:-Potentiometer

- C:-Lactometer
- D:-Spectrophotometer

Correct Answer:- Option-C

Question29:-The NABL (National Accreditation Board for Testing and Calibration Laboratories) accreditation certificate issued to a laboratory is valid for a period of _____ years.

- A:-3
- B:-2
- C:-1
- D:-5

Correct Answer:- Option-B

Question30:-Glucose is increasingly used as an adulterant in milk and Barfoed's reagent is used to detect its presence. The major ingredient of Barfoed's reagent is

- A:-Copper acetate
- B:-Lead acetate
- C:-Zinc acetate
- D:-Lithium acetate

Correct Answer:- Option-A

Question31:-Name the test which is not used to determine the presence of formalin in milk.

- A:-Leach test
- B:-Hehner test
- C:-Chromotropic acid test
- D:-Rosalic acid test

Correct Answer:- Option-D

Question32:-The antibiotic, streptomycin falls under the main class

- A:- β -lactam compounds
- B:-Aminoglycosides
- C:-Macrolides
- D:-Sulfonamides

Correct Answer:- Option-B

Question33:-The permissible maximum limit of lead in increase in parts per million by weight is

- A:-1
- B:-2
- C:-0.5
- D:-5.0

Correct Answer:- Option-A

Question34:-Biological Oxygen Demand (BOD) is the amount of dissolved oxygen consumed by microorganisms for biochemical oxidation of organic solids in water. One gram of milk fat has a BOD of _____ g

- A:-1.03
- B:-0.65
- C:-0.89
- D:-0.63

Correct Answer:- Option-C

Question35:-Food safety and standards' Rules of FSSAI has come into existence in the year

- A:-2011
- B:-2015
- C:-2012
- D:-2006

Correct Answer:- Option-A

Question36:-The headquarter of ISO (International Organisation for Standardization) is in

- A:-Canada
- B:-Geneva
- C:-New York
- D:-Brussels

Correct Answer:- Option-B

Question37:-The equivalent weight of sulphuric acid is

- A:-36 u
- B:-49 u
- C:-98 u
- D:-52 u

Correct Answer:- Option-B

Question38:-Vanadium Pentoxide Test is used to determine the presence of _____ in milk.

- A:-Salicylic acid
- B:-Starch
- C:-Hydrogen peroxide
- D:-Sugar

Correct Answer:- Option-C

Question39:-The Gerber's acid is _____ % of concentrated sulphuric acid by mass.

- A:-96 - 99
- B:-85 - 89
- C:-83 - 85
- D:-90 - 91

Correct Answer:- Option-D

Question40:-The zeal lactometer is designed to determine the specific gravity of milk at

- A:-27 °C
- B:-32 °C
- C:-29 °C
- D:-40 °C

Correct Answer:- Option-C

Question41:-All aminoacids except _____ show optical activity.

- A:-Alanine
- B:-Glycine
- C:-Leucine
- D:-Isoleucine

Correct Answer:- Option-B

Question42:-Cellulose is a polymer of _____ units.

- A:-L-glucose
- B:-L-fructose
- C:-D-glucose
- D:-D-fructose

Correct Answer:- Option-C

Question43:-The enzyme glutathione peroxidase contains

- A:-Selenium
- B:-Zinc
- C:-Chromium
- D:-Molybdenum

Correct Answer:- Option-A

Question44:-The defatting of bones in the production of gelatin is facilitated by using _____ hydrolysis.

- A:-Amylase catalysed
- B:-Invertase catalysed
- C:-Lipase catalysed
- D:-Protease catalysed

Correct Answer:- Option-C

Question45:-The fat globule membrane and/or whey proteins may participate in mallard browning with lactose and the cysteine may undergo β -elimination to dehydroalanine which may then react with lysine to form

- A:-Arginine
- B:-Aspartic acid
- C:-Lysinoalanine
- D:-Lanthionine

Correct Answer:- Option-C

Question46:-Find out the protein with the following properties; molecular weight-36,000 dalton, isoelectric point-5.2, heat labile and gets denatured on heating.

- A:- β -lactoglobulin
- B:-Alpha-lactalbumin
- C:-Lactoferrin
- D:-Blood serum albumin

Correct Answer:- Option-A

Question47:-Type-II galactosemia is caused by

- A:-Deficiency of enzyme galactokinase
- B:-Deficiency of galactose - 1 - phosphate uridylyl transferase

C:-Deficiency of enzyme UDP galactose epimerase

D:-Deficiency of phenylalanine hydroxylase

Correct Answer:- Option-A

Question48:-The viable number of organisms in food with added probiotic ingredients shall be _____ CFu in the recommended serving size per day.

A:- $\geq 10^6$

B:- $\geq 10^8$

C:- $\geq 10^5$

D:- $\geq 10^4$

Correct Answer:- Option-B

Question49:-The nutritive value of milk fat is _____ kilocalories/g.

A:-4.5

B:-6

C:-4

D:-9

Correct Answer:- Option-D

Question50:-The half life of isotope is

A:-5 years

B:-7 years

C:-8 days

D:-25 days

Correct Answer:- Option-C

Question51:-One hour Resazurin disc number 3.5 to 1.0 indicate the grade of raw milk as

A:-Very good

B:-Good

C:-Fair

D:-Poor

Correct Answer:- Option-C

Question52:-_____ is a thermophilic bacteria that is mostly derived from milking equipment which shows 100% survival during pasteurization.

A:-Clostridium botulinum

B:-Enterobacter aerogenosa

C:-Streptococcus uberis

D:-Mycobacterium lacticum

Correct Answer:- Option-D

Question53:-_____ are more sensitive to lytic action of lysozyme.

A:-Gram positive bacteria

B:-Gram negative bacteria

C:-Both 1 and 2

D:-Spore formers

Correct Answer:- Option-A

Question54:-The non specific antimicrobial factor which is present in considerable amount in cow milk but absent in human milk

A:-Lactanin

B:-Lysozyme

C:-Lactoferrin

D:-Lactoperoxidase

Correct Answer:- Option-D

Question55:-Which one of the following is psychrotrophic gram negative bacteria ?

A:-Flavobacterium

B:-Clostridium

C:-Bacillus

D:-Streptococcus

Correct Answer:- Option-A

Question56:-In case of _____ involvement of even one person contributes an outbreak.

A:-Salmonellosis

B:-Shigelosis

C:-Botulism

D:-Q fever

Correct Answer:- Option-C

Question57:-Widal test is used for the diagnosis of

- A:-Q fever
- B:-Typhoid fever
- C:-Scarlet fever
- D:-Milk fever

Correct Answer:- Option-B

Question58:-As per FSSAI microbiological standards, limit for coliform count in pasteurized milk is

- A:-m=0
- B:-m<10/ml
- C:-m<1/ml
- D:-m<100/ml

Correct Answer:- Option-B

Question59:-The enzyme of bacterial origin that contributes to bitty cream defect in milk

- A:-Lysozyme
- B:-Catalase
- C:-Lecithinase
- D:-Protease

Correct Answer:- Option-C

Question60:-The microorganism that produce strawberry like aroma in milk and butter held at low temperature

- A:-Pseudomonas fragi
- B:-Pseudomonas fluorescens
- C:-Pseudomonas mucidolens
- D:-Pseudomonas synchyanea

Correct Answer:- Option-A

Question61:-High total count but low coliform count in cream indicates

- A:-Poor hygiene in manufacture but storage at <5°C
- B:-Good hygiene but storage at high temperature
- C:-Inadequate heat treatment
- D:-Good hygiene except aerial contamination

Correct Answer:- Option-B

Question62:- _____ ppm of residual chlorine in water have been found effective in ensuring good quality butter.

- A:-0.5-1
- B:-1-5
- C:-5-10
- D:-10-15

Correct Answer:- Option-B

Question63:-Fishiness in butter is due to the production of

- A:-Acetaldehyde
- B:-Diacetyl
- C:-Trimethyl amine
- D:-All of these

Correct Answer:- Option-C

Question64:-As per FSSAI microbiological standards, sampling plan for Enterobacter sakazakii in infant milk foods are

- A:-n=30; c=0
- B:-n=5; c=0
- C:-n=30; c=2
- D:-n=5; c=2

Correct Answer:- Option-A

Question65:-The enzyme invertase produced mainly by _____ convert sucrose to glucose and fructose in sweetened condensed milk and cause bloat.

- A:-Coliforms
- B:-Bacillus
- C:-Clostridium
- D:-Yeast

Correct Answer:- Option-D

Question66:-In microbiological terms recovery of fine powders after spray drying appears safest by using _____ system.

- A:-Cyclone
- B:-Fabric filter
- C:-Both

D:-None

Correct Answer:- Option-A

Question67:-The polysaccharide gum 'Kefiran' in kefir grains is composed of

A:-Glucose + Fructose

B:-Glucose + Glucose

C:-Glucose + Galactose

D:-Glucose + Mannose

Correct Answer:- Option-C

Question68:-The breakdown of fat into lower chain free fatty acids and glycerol by microbial lipase can cause

A:-Acidity

B:-Hydrolytic rancidity

C:-Ketonic rancidity

D:-Oxidative rancidity

Correct Answer:- Option-B

Question69:-Citrate permease, an enzyme involved in citrate metabolism is active below pH

A:-6

B:-4.3

C:-6.6

D:-7

Correct Answer:- Option-A

Question70:-Limit (m) for E-coli in pasteurized butter as per FSSAI microbiological standards is

A:-<1/g

B:-<10/g

C:-<50/g

D:-Absent/g

Correct Answer:- Option-D

Question71:-_____ are the set of activities intended to ensure that quality requirements are actually being met.

A:-Quality control

B:-Quality assurance

C:-Food safety

D:-CCP

Correct Answer:- Option-A

Question72:-_____ provides a description of adverse health effects that may result from ingestion of a microorganism.

A:-Hazard identification

B:-Exposure assessment

C:-Hazard characterisation

D:-Risk characterisation

Correct Answer:- Option-C

Question73:-The guidelines for establishing quality management system is provided by

A:-ISO 9001:2000

B:-ISO 9004:2000

C:-ISO 22000

D:-ISO 9000:2000

Correct Answer:- Option-B

Question74:-Risk group 4 includes microorganisms with

A:-No or low individual and community risk

B:-Moderate individual risk and low community risk

C:-High individual risk and low community risk

D:-High individual and high community risk

Correct Answer:- Option-D

Question75:-HEPA filtered air from _____ biosafety cabinet can be safely recirculated back into the laboratory environment if the cabinet is tested and certified at least annually and operated according to manufacturer recommendations.

A:-BSL I

B:-BSL II

C:-BSL III

D:-BSL IV

Correct Answer:- Option-B

Question76:-The microbiological limit that separates unsatisfactory from satisfactory in a 3 class sampling plan

A:-c

B:-m

C:-M

D:-n

Correct Answer:- Option-C

Question77:-Among milk solids higher BOD value is for

A:-Fat

B:-Protein

C:-Lactose

D:-Lactic acid

Correct Answer:- Option-B

Question78:-People who acquire and harbour a pathogen through close contact with an infected person but do not acquire the disease

A:-Contact carrier

B:-Convalescent carrier

C:-Chronic carrier

D:-None

Correct Answer:- Option-A

Question79:-Air sanitation system applied to control air borne contamination in dairy processing area

A:-Fogging

B:-UV light

C:-Ozone

D:-All of these

Correct Answer:- Option-D

Question80:-One of the primary changes between PFA and FSSA is in the responsibility of food safety on

A:-Food inspector

B:-Manufacturer

C:-Consumer

D:-Quality control labs

Correct Answer:- Option-B

Question81:-Freeze drying is also known as

A:-Stassanisation

B:-Spray drying

C:-Lyophilisation

D:-HPLC

Correct Answer:- Option-C

Question82:-Thermophilic lactic starter cultures can be used for the preparation of

A:-Acidophilus Milk

B:-Yoghurt

C:-Dahi

D:-All of the three options

Correct Answer:- Option-D

Question83:- _____ is not a homo-fermentative starter culture.

A:-Lactobacillus lactis

B:-Lactobacillus helveticus

C:-Lactobacillus gasseri

D:-Lactobacillus bifementous

Correct Answer:- Option-D

Question84:- _____ is a lactic starter capable of fermenting galactose.

A:-Lactobacillus acidophilus

B:-Lactobacillus helveticus

C:-Lactobacillus bulgaricus

D:-Lactobacillus casei

Correct Answer:- Option-B

Question85:- _____ is a prebiotic.

A:-Bifidobacterium

B:-Lactobacillus

C:-Oligosaccharide

D:-Propionibacterium

Correct Answer:- Option-C

Question86:-The following starter culture is used for Koumiss making is

A:-*Saccharomyces unisporus*

B:-*Aspergillus flavus*

C:-*Coxiella burnetii*

D:-*Propionibacterium shermanii*

Correct Answer:- Option-A

Question87:-_____ is the principle substrates utilized by LAB for diacetyl production.

A:-Glucose

B:-Galactose

C:-Citrate

D:-Maltose

Correct Answer:- Option-C

Question88:-_____ is a thermophilic dairy starter culture organism.

A:-*Lactobacillus*

B:-*Lactococcus*

C:-*Leuconostoc*

D:-*Pediococcus*

Correct Answer:- Option-A

Question89:-_____ is not an obligately homofermentative starter culture organism.

A:-*Lactobacillus paracasei*

B:-*Lactobacillus bulgaricus*

C:-*Lactobacillus kefirifaciens*

D:-*Lactobacillus johnsonii*

Correct Answer:- Option-A

Question90:-Which of the following starter cultures can utilize aesculin ?

A:-*Leuconostoc cremoris*

B:-*Lactococcus lactis* subsp. *cremoris*

C:-*Streptococcus thermophilus*

D:-*Pediococcus acidilactici*

Correct Answer:- Option-C

Question91:-Time required to destroy 90% of viable pathogenic organisms at specific temperature is called

A:-A-Value

B:-F-Value

C:-D-Value

D:-Z-Value

Correct Answer:- Option-C

Question92:-_____ is a sulphide-related spoilage sporeformer organism.

A:-*Clostridium nigrificans*

B:-*Clostridium tetani*

C:-*Clostridium perfringens*

D:-*Clostridium botulinum*

Correct Answer:- Option-A

Question93:-Bioactive peptide can be released by

A:-Enzymatic hydrolysis by digestive enzymes

B:-Proteolysis by enzymes derived from microorganisms

C:-Food processing

D:-All the above

Correct Answer:- Option-D

Question94:-The maximum allowable number of defective sample units is represented by

A:-n

B:-m

C:-p

D:-c

Correct Answer:- Option-D

Question95:-*Mycobacterium* species, including *M. paratuberculosis* can be obtained from the patients suffering from

A:-Crohn's disease

B:-Johnson's disease

C:-Salmonellosis disease

D:-Typhoid disease

Correct Answer:- Option-A

Question96:-The toxin produced by Staphylococcus aureus is known as

A:-Ochratoxin

B:-Enterotoxin

C:-Mycotoxin

D:-Aflatoxin

Correct Answer:- Option-B

Question97:-Clostridium botulinum produces a toxin known as

A:-Thermostable toxin

B:-Alpha toxin

C:-Neurotoxin

D:-Beta toxin

Correct Answer:- Option-C

Question98:-_____ in pathogenic bacteria is known as a big challenge for public health worldwide.

A:-Thermostability

B:-Antibiotic resistance

C:-Mutation

D:-Emergence of new pathogens

Correct Answer:- Option-B

Question99:-_____ is a pathogenic bacteria known to grow very swiftly in chocolate milk.

A:-Yersinia enterocolitica

B:-Vibrio cholera

C:-Giardia lamblia

D:-Listeria monocytogenes

Correct Answer:- Option-D

Question100:-_____ is a non-culture method to detect pathogenic bacteria in dairy products.

A:-PCR

B:-TCR

C:-MCR

D:-CCR

Correct Answer:- Option-A