

SECTION 1 - SECTION 1

Question No.1

This amino acid is the precursor of ethylene in fruits

- Cystine
- Histidine
- Methionine
- Valine

Question No.2

Amla products are difficult to preserve because

- Astringent taste
- High acidity
- Delicate flavor
- Non-enzymatic browning

Question No.3

Which one of the following is not a hard cheese?

- Cheshire
- Camembert
- Cheddar
- Swiss

Question No.4

FFS packaging stand for

- Form fill seal
- Form file seal
- Fold fill seal
- Fold file seal

Question No.5

What is the type of reaction involved in the conversion of xylulose-5- phosphate to form glyceradehyde -3- phosphate

- Oxidation
- Dehydrogenation
- Transketolation
- Transadolation

Question No.6

Which of the following is biodegredeable plastic?

- Poly propylene

- LDPE
- Polythene
- Polyhydroxy butyrate

Question No.7

Molecular diffusion is a phenomenon analogous to heat transfer by

- Conduction
- Convection
- Both conduction and convection
- Radiation

Question No.8

Which of the following tocopherols has highest antioxidant property?

- β – tocopherol
- γ – tocopherol
- α – tocopherol
- κ - tocopherol

Question No.9

A dose of _____ KGy is required for a 12D reduction of *Clostridium botulinum*

- 45
- 40
- 48
- 43

Question No.10

The mineral which is associated with goiter is

- Magnesium
- Sodium
- Calcium
- Iodine

Question No.11

The " temperature danger zone" is:

- 0 - 100 degrees F
- 180 - 350 degrees F
- 40 -140 degrees F
- 65 - 140 degrees F

Question No.12

Saponification is also known as

- Alkali hydrolysis

- Enzyme hydrolysis
- Acid hydrolysis
- None of these

Question No.13

Which is not true to describe the properties of supercritical fluid?

- Liquid like diffusivity
- Liquid like density
- High selectivity
- Gas like viscosity

Question No.14

Total food grain production in 2007-08

- 200 MT
- 231 MT
- 250 MT
- 175 MT

Question No.15

Which method is not a non-thermal processing?

- Ohmic heating
- Ultrasound
- Pulsed light
- Cold Plasma

Question No.16

Which one is not a fermented food

- Miso
- Marmalade
- Tempeh
- Bread

Question No.17

Which of the following is true about ISO 2002 method for Salmonella detection

- Selenite cystine (SC) broth is replaced by Muller Kauffmann tetrathionate novobiocin broth (MKTTn)
- BGA is the first isolation medium rather than XLD
- Rappaport Vassiliadis (RV) broth is replaced by Muller Kauffmann tetrathionate novobiocin broth (MKTTn)
- Rappaport Vassiliadis (RV) broth has been replaced by Selenite cystine (SC) broth

Question No.18

Thermal conductivity has the unit of

- W.m⁻¹
- W.m⁻¹.K⁻¹
- W.m⁻²
- W.m⁻².K⁻¹

Question No.19

_____ coffee is prepared by forcing an atomized spray of very strong coffee extract through a jet of hot air.

- Espresso
- Decaffeinated
- Instant
- Black

Question No.20

Which one of the following is not narrow-spectrum antibiotics

- colistin
- kanamycin
- oleandomycin
- novobiocin

Question No.21

A _____ pump consists of a reciprocating or rotating cavity between two lobes or gears and a rotor.

- Negative
- Centrifugal
- Hand
- Positive

Question No.22

In _____, FDA approved the use of irradiation to control pathogens in fresh and frozen red meats, such as beef, lamb, and pork.

- 1997
- 1988
- 1975
- 1990

Question No.23

Neohesperidine dihydrochalcone from citrus is responsible for

- Sweetness
- Bitterness
- Saltiness
- Astringency

Question No.24

Carbohydrates are also described as

- Polyhydric acid
- Polyhydric adlehydes
- Polyhydric ketones
- Polyhrdric alcohols

Question No.25

During a heterogeneous system operation involving mass transfer from gas to liquid to solid, the “rate controlling step” is the

- Second largest step
- Intermediate step
- Fastest step
- Slowest step

Question No.26

This is an indicator of insect infestation in cereal and legume flours

- Lactic acid
- Uric acid
- Acetic acid
- Citric acid

Question No.27

The heat resistance of micororganisms is expressed in the term of

- thermal death rate
- thermal death point
- bacterial count
- thermal death time

Question No.28

What happens to the boiling point of water when it is heated at high altitude

- Remains the same
- Water does not boil
- Decreases
- Increases

Question No.29

Which of the following factor cannot affect the enzyme activity

- Temperature
- pH
- Presence of metal ion
- RH

Question No.30

Reassociation of amylose and formation of crystalline structure upon cooling of cooked starch solution is termed as

- Retrogradation
- Gelatinization
- Denaturation
- Syneresis

Question No.31

Which vitamin is used most commonly to control browning in fruits by enzymes?

- D
- C
- K
- B

Question No.32

HTST pasteurization is done at _____ °C

- 62.8
- 68
- 71.7
- 150

Question No.33

Lecithinase enzyme found in cobra venom is

- Lecithinase D
- Lecithinase A
- Lecithinase C
- Lecithinase B

Question No.34

Plasmids are

- Extra - chromosomal circular DNA in some bacteria
- Donar DNA
- Vectors
- Virus

Question No.35

The hormone which is a glycoprotein and has high cystine content is

- Follice stimulating hormone
- Lactogenic hormone
- Growth hormone
- Thyroid stimulating hormone

Question No.36

The breaking down of protein is known as

- preservation
- acidification
- ammonification
- putrefaction

Question No.37

Shell-egg are cooked in water at

- 80.4°C for 40 minutes
- 56.2°C for 20 minutes
- 60°C for 10 minutes
- 52.2°C for 30 minutes

Question No.38

Which of the following acid will have higher bacteriostatic effect at a given pH?

- Maleic acid
- Acetic acid
- Citric acid
- Tartaric acid

Question No.39

In the Embden Meyerhof pathway, conversion of 3-phosphoglycerate to phosphoenol pyruvate is catalysed by the enzyme

- Phosphoglyceromutase
- Phosphofructokinase
- Phosphoglyceratekinase
- Enolase

Question No.40

According to US FDA, Irradiation comes under the category of

- Food Adulteration
- Food Preservative
- Food additive
- Food Processing Aid

Question No.41

Polyphosphoric acid is a

- Base leavening agent
- Chelating agent
- Acid leavening agent

- Buffering agent

Question No.42

The chief organism responsible for the production of gas is

- coliform bacteria
- eschericia coli
- clostridium botulinum
- all of these

Question No.43

Which one of the following is not correct?

- Small pox - variola
- Measles - rubeola morbelli
- Rabies - infantile paralysis
- German measles - rubella

Question No.44

Protein metabolism is influenced by

- Epinephrine
- Thyroxine
- Insulin
- Androgens

Question No.45

Which theory states that "pectin solution is stable". Pectin molecules are negatively charged. Increase in acidity/alkalinity decreases its stability

- Spencer's theory
- Hinton's theory
- Olsen's theory
- Fibrill theory

Question No.46

Ergotism is caused due to consumption of contaminated with *Claviceps purpurea*.

- Groundnut
- Pearl millet
- Toor dal
- Corn

Question No.47

Milk, contains insufficient iron for pigmentation of the spores of

- penicillium roqueforti
- salmonella

- streptococcus faecalis
- pseudomonas

Question No.48

Lister monocytogenes can grow at temperature as low as

- 12° C
- 15° C
- 7° C
- 4° C

Question No.49

Which of the following method is a quick test for sugar content during early stages of brewing of beer

- Babcock test
- Polarimetry
- Hydrometry
- Wet ashing

Question No.50

The term green revolution was coined by

- Vargheese Kurian
- William Goude
- Ralph W Cumming
- J A Woelcker

Question No.51

Which of the following is responsible for the purple color of meat?

- Oxymyoglobin
- Metmyoglobin
- Oxyhaemoglobin
- Deoxymyoglobin

Question No.52

Which of the following is an emulsifier

- Palmitic Acid
- Lecithin
- Lactose
- Casein

Question No.53

Long term ingestion of large quantities of lycopene can lead to

- Lycopendermia
-

Lycopene psoriasis

- Lycopene keratosis
- Lycopene dermatomyositis

Question No.54

The volatile component in cardamom is

- Cineole
- Camphor
- Carvacrol
- Camphene

Question No.55

The swelling of moist macaroni has been reportedly caused by gas producing bacteria such as

- enterobacter aerogenes
- enterobacter colacace
- enterobacter oxytocum
- none of these

Question No.56

Formation of oxymyoglobin, when molecular oxygen binds to myoglobin is termed as

- Oxygenation
- Dehydration
- Oxidation
- Dehydrogenation

Question No.57

In connection with the microbial growth cycle, during the accelerated phase, cell starts to

- increase and the division rate increases to reach a maximum
- decrease and the division rate increases to reach a maximum
- increase and the division rate increases to reach a minimum
- increase and the division rate decreases to reach a maximum

Question No.58

In packaging of food as Crystallinity increases which one of the following statements is true?

- The impact strength is increased
- The tensile strength is reduced
- Moisture barrier properties decrease
- Oxygen barrier properties increase

Question No.59

Which one of the microorganisms given below is *not responsible* for ropy or stringy fermentation of milk?

- Streptococcus lactis

- Enterobacter aerogenes
- Alcaligenes viscolactis
- Streptococcus cremoris

Question No.60

The volume of oil that can be emulsified per gram of protein before phase inversion occurs is known as

- Emulsion capacity
- Emulsion load
- Emulsion stability
- Emulsion activity index

Question No.61

The formation of glucose from non- carbohydrate source is known as

- Glycgenolysis
- Glycolysis
- Gluconeogenesis
- Glycogenesis

Question No.62

The test in which sugar solution is boiled with copper acetate and acetic acid is

- Nylanders test
- Barfoeds test
- Glucazone formation
- Osazone formation

Question No.63

Kinase reactions;

- Involves addition or removal of phosphate group
- Involves transfer of hydrogen
- Inhibit ATP break down
- Involves addition or removal of ketone group

Question No.64

The hormone which is a single polypeptide chain composed of 190 amino acids is

- Thyroid stimulating hormone
- Growth hormone
- Lactogenic hormone
- Follice stimulating hormone

Question No.65

The process of transfer of an amino group from an amino acid to an original keto acid is known as

- Transamidation

- Transamidination
- Transamination
- Transdeamination

Question No.66

For commercial sterilization of low acid food products, the log reduction required for *Clostridium botulinum* is

- 10 log cycle
- 8 log cycle
- 5 log cycle
- 12 log cycle

Question No.67

For lumped system approach which non-dimensional number is used?

- Nusselt number
- Biot number
- Reynolds number
- Grashof number

Question No.68

Which one of the following microorganisms is used in the preparation of bread?

- Saccharomyces boullardii*
- Saccharomyces cerevisiae*
- Saccharomyces bayanus*
- Saccharomyces cevarum*

Question No.69

The driving force for mass transfer by molecular diffusion is the difference in

- Potential energy
- Chemical potential
- Gibbs Free energy
- Vapor pressure

Question No.70

The primary ester bonds of triacylglycerol is hydrolyzed by

- Pancreatic hydrolase
- Pancreatic lipase
- Pancreatic oxidase
- Pancreatic triacylase

Question No.71

Which of the following is not one of the twenty common amino acids?

- $\text{NH}_2\text{-CO-CH}_2\text{-CHNH}_2\text{-COOH}$
- $\text{CH}_3\text{-CHNH}_2\text{-COOH}$
- $\text{HOCHNH}_2\text{-CH}_2\text{-COOH}$
- $\text{HOOC-CH}_2\text{-CHNH}_2\text{-COOH}$

Question No.72

The protein that contain prophyrin as the prosthetic group is termed as

- Chromoprotein
- Mucoprotein
- Mettaloprotein
- Lipoprtoein

Question No.73

Invert sugar has the specific rotation of ___ due to presence of ____.

- -92° , fructose
- -19.6° , glucose
- -19.6° , fructose
- -92° , glucose

Question No.74

A method involving a freezing time of 30 minutes or less is

- slow freezing
- dehydro freezing
- sharp freezing
- quick freezing

Question No.75

Which of the following is not a product of fermentation?

- Carbon-di-oxide
- Lactate
- Ethanol
- Oxygen

Question No.76

Lipositol is derived from

- Diglyceride
- Phospatidic acid
- Cephalin
- Lecithin

Question No.77

Which one of the given steps in bulk chocolate manufacture helps to improve the flavor?

- melangeuring
- conching
- refining
- tempering

Question No.78

The enzymes of glycolysis is located in

- Mitochondria
- Nucleus
- Cytoplasm
- Lysozyme

Question No.79

Thermus aquaticus is source of

- Taq polymerase
- Vent polymerase
- DNA polymerase II
- pfu polymerase

Question No.80

At a certain temperature, the time (in min) required to reduce the microbial load by a factor of 10 is called as

- Z-value
- F-value
- Q-value
- D-value

Question No.81

The tip of the fertile hyphae is known as

- Sporangiospore
- Conidiospore
- Sporangium
- Arthrospore

Question No.82

Fractional sterilization means

- Radiation sterilization
- Membrane filtration
- Incineration
- Tyndallisation.

Question No.83

Ropiness is caused by a mucoid variant of

- bacillus subtilis
- goetrichum aurantiacium
- oidium quarantiacum
- licheniformis

Question No.84

Blanching influences vegetable tissues in terms of

- stabilization of nuclear proteins
- enzymes production
- alteration of cytoplasmic membrane
- stabilization of cytoplasmic proteins

Question No.85

The structural group of carotenoids is

- β xanthophylls
- Xanthophylls
- Oxygenated xanthophylls
- α xanthophylls

Question No.86

Standardized milk contains minimum milk fat percent and minimum percent MSNF as:

- 3.5 and 7.0
- 4.5 and 8.5
- 1.5 and 9.0
- 6.0 and 9.0

Question No.87

Which one of the following is not the result of blanching of potato chips?

- Reducing the load of fryer
- Reduced frying time
- Surface gelatinization
- Reduced fat absorption

Question No.88

The prominent enzyme in honey is

- β glucosidase
- α glucosidase
- galactase
- glucose reductase

Question No.89

Pasteurization by radiation in food is called

- Cold sterilization
- Radicidation
- Radappertization
- Radurization

Question No.90

Parital hydrolysis of collagen by steam gives

- Cephalin
- Gelatin
- Protamines
- Phosphoprotein

Question No.91

α -Glycosylated stevioside is produce by which of the following enzyme?

- β -Galactosidase
- α -Glucosidase
- α -1,6-Glycosyltransferase
- β -Glycosyltransferase

Question No.92

Masses of viruses that are intracellular inclusions are called as

- Elementary bodies
- Bodies
- Guarnieri bodies
- Negri bodies

Question No.93

In India, HACCP certification has been made compulsory for export oriented unit.

- Fruits and vegetable
- Seafood
- Meat and egg products
- Cereals and pulses

Question No.94

The bitter compound that is present in most foods include

- Glutamate
- Procyanidin
- Saccharin
- Phenylthiocarbamide

Question No.95

Which one of the given options is used in the context of a food additive

- RDA
- HACCP
- GMP
- GRAS

Question No.96

Destruction of molds on the surface of bread is done by

- electronic heating
- ultraviolet irradiation
- freezing
- none of these

Question No.97

Most of the spoilage and pathogenic bacteria which contaminate the food materials having water activity within

- 0.81-0.85
- 0.75-0.80
- 0.86-0.90
- 0.91-0.99

Question No.98

The important role of carotenoids in the human diet is their ability to serve as precursors of

- Vitamin C
- Vitamin D
- Vitamin K
- Vitamin A

Question No.99

Perishable foods are stored at -18°C or below because at that temperature

- No microbial growth along with no enzymatic action
- Limited microbial growth along with no enzymatic reaction
- No microbial growth along with slow rate of enzymatic reaction
- Complete microbial inactivation along with slow rate of enzymatic reaction

Question No.100

Which one of the following can be used as pressure transmitting medium for generating high pressure (400-600 MPa)?

- Air
- Water
- Hydrogenated oil
- Nitrogen

