

**SECTION 1 - SECTION 1**

**Question No.1**



Sprouting in potatoes can be inhibited by irradiation using a dose range of \_\_\_kGy

- 0.26 -0.35
- 0.01-0.05
- 0.06 – 0.15
- 0.16 – 0.25

**Question No.2**



100 kg of grain is dried from 18%(wb) to13%(wb) moisture. The amount of water removed (in kg) is

- 4.8
- 6.2
- 5.0
- 5.7

**Question No.3**



Which of the following is not a glazing agent

- Sodium silicate
- Shellac
- Magnesium Silicate
- Gum Arabic

**Question No.4**



The amount of heat required to raise the temperature of a given mass by unit value is also known as

- Thermal conductivity
- Heat capacity
- Specific heat
- Thermal diffusivity

**Question No.5**



One atmospheric pressure is equal to

- 1.0 kg/m<sup>2</sup>
- 1.0 kg/cm<sup>2</sup>
- 1.0 N/m<sup>2</sup>
- 1.0 ton/m<sup>2</sup>

**Question No.6**

The process of heat transfer from one particle of the body to another by the actual motion of the heated particle is

- Evaporation
- Convection
- Radiation
- Conduction

**Question No.7**

A constant volume non-flow thermodynamic process is known as

- Adiabatic process
- Isobaric process
- Isentropic process
- Isochoric process

**Question No.8**

Formula for body mass index is

- Weight divided by height squared
- Height divided by weight
- Weight divided by height
- Height divided by weight squared

**Question No.9**

\_\_\_\_\_ is a non fermentable sugars.

- Raffinose
- Fructose
- Xylose
- Glucose

**Question No.10**

In PERT approach which time is not estimated

- Most likely time
- Optimistic time
- Earliest finish time
- Pessimistic time

**Question No.11**

Which of the following is a natural emulsifier?

- Lecithin
-

Glycerol monostearate

- Tertiary butyl hydroquinone
- Solbak

**Question No.12**



Which of the following is more applicable in size reduction of fine powders?

- Bond's law
- Kick's law
- Newtons' law
- Rittinger's law

**Question No.13**



Fluid flow in circular pipe is said to be laminar if the Reynolds number is

- Less than 2000
- Equal to 2001
- Equal to 2100
- More than 2010

**Question No.14**



Developed bitterness of ground nut kernel is mainly due to

- Cholera toxin
- Aflatoxins
- Botulinus toxins
- Bacterial toxins

**Question No.15**



Most spoilage and pathogenic bacteria which contaminate food materials have water activity in the range of

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

**Question No.16**



Bis Phenol A (BPA) is a cause of concern in \_\_\_\_\_ types of plastic packaging

- LDPE
- PP
- PET

- Polycarbonate

**Question No.17**

\_\_\_\_\_ provides more than double the energy provided by carbohydrates or proteins in human body

- Vitamins
- Minerals
- Fat
- Starch

**Question No.18**

Optimum storage temperature of bread with respect to staling is

- Frozen storage
- Room temperature
- Refrigeration
- Elevated temperature

**Question No.19**

A special type of pasteurizing apparatus used, particularly in butter industry

- Wing top pasteurizer
- Vat pasteuriser
- Dome top pasteurizer
- Vacreator

**Question No.20**

The destruction of all microorganisms in food by thermal processing is known as

- Scalding
- Blanching
- Sterilization
- Pasteurization

**Question No.21**

Xylitol is abundant in \_\_\_\_\_ vegetable

- Mushroom
- Broccoli
- Cauliflower
- Ladies Finger

**Question No.22**

The yolk or yellow portion makes up about \_\_\_\_ percent of the liquid weight of the egg. ■

- 12
- 34
- 43
- 22

**Question No.23**

Worlds' staple food grain is ■

- Maize
- Rice
- Sorghum
- Wheat

**Question No.24**

The percentage of bran received from paddy is ☑

- 20%
- 5%
- 15%
- 10%

**Question No.25**

Kinematic viscosity is ■

- Viscosity divided by mass
- Viscosity in the turbulent flow range
- Viscosity divided by density
- Viscosity in the laminar Flow range

**Question No.26**

Separation of liquids from solids by the application of pressure is known as ■

- Extraction
- Filtration
- Leaching
- Expression

**Question No.27**

Blue color on the surface of meat is caused by ☑

- Serratia marcescense*
- Thamnidium*

- Pseudomonas syncyanea*
- Pencillium expansum*

**Question No.28**



Ionizing radiation of \_\_\_\_\_ kGy is effective for insect disinfection.

- >1.00
- 0.75 - 7.5
- 0.25 - 1.00
- 1.00 - 3.00

**Question No.29**



Concept of combining several factors to preserve food is termed as

- Hazard technology
- Multiple processing
- Hurdle technology
- Minimum preservation

**Question No.30**



Swiss cheese is also known as

- Cottage cheese
- Emmental cheese
- White cheese
- Brown cheese

**Question No.31**



Alcohol, although not a nutrient, supplies energy that is about \_\_\_\_\_ calories per gram.

- 8
- 9
- 7
- 4

**Question No.32**



A 100°S, represents a saturated brine solution of \_\_\_\_\_ % salt

- 42.5
- 26.5
- 28.5
- 35.5

**Question No.33**



For smooth floor surfaces, in vertical silos the slope angle should be

- 20-30 °
- 40-45 °
- > 45 °
- 30-35 °

**Question No.34**

Pessimistic time in project scheduling is the

- Subjective estimate of most frequent time
- Shortest possible time (ideally)
- Critical path time
- Longest time possible if everything went wrong

**Question No.35**

If the moisture content on wet basis is 20%, then what would be the % moisture content on dry basis?

- 20
- 25
- 18
- 22

**Question No.36**

Safe moisture content (% w.b.) for storage of paddy is

- 13
- 10
- 12
- 11

**Question No.37**

Dry ice is known as

- Solidified carbon-di-oxide
- Solidified water kept in moisture free environment
- Solidified freon-12
- Solidified nitrogen

**Question No.38**

Which of the following amino acid combination is not found in Pulses

- Tryptophan, Lysine
- Methionine, Glycine
- Lysine, Cysteine

- Cysteine, Methionine

**Question No.39**

Which is not preferred to retard oxidative rancidity of fat or oil is

- Butylated hydroxyanisole  
 Butylated hydroxytoluene  
 Ethyl salicylate  
 Ethyl gallet

**Question No.40**

Glucose in an aqueous solution, can exist in \_\_\_\_\_ tautomeric forms at room temperature

- 1  
 3  
 4  
 2

**Question No.41**

The number of degrees required for a specific thermal death time curve to pass through one log cycle is defined as

- Z value  
 F value  
 D value  
 Q value

**Question No.42**

The weight of air contained in a room of dimension 15 m x 10m x 4m high at atmospheric pressure and 20° C temperature is

- 520 Kg  
 820 Kg  
 620 Kg  
 720 Kg

**Question No.43**

The lower limit of moisture by sun drying is approximately \_\_\_\_\_ percent.

- 15  
 10  
 30  
 20



**Question No.44**

The nutritional information is necessary in which of the following foods

- Foods with a nutrition or health claim is made on the label.
- Foods which are single ingredient products
- Packaged fresh produce.
- Foods for catering purposes such as served in hospitals

**Question No.45**

A dimensionless ratio of inertial to viscous forces in case of fluid flow is better known as

- Stanton number
- Reynolds number
- Froude's number
- Prandit number

**Question No.46**

\_\_\_\_\_ is one of the most widely used food additive to prevent the separation of food components to ensure consistency.

- Papain
- Propyl Gallate
- Bromelin
- Lecithin

**Question No.47**

The insulating materials have

- High thermal conductivity
- Low thermal conductivity
- Zero thermal conductivity
- Negative thermal conductivity

**Question No.48**

Pascal is a unit of

- Viscosity
- Temperature
- Pressure
- Displacement

**Question No.49**

Amylose is comparatively resistant to digestion due to the \_\_\_\_\_ structure.

- Helical

- Linear
- Planar
- Branched

**Question No.50**

The major defect in ice cream caused by lactose is

- Fluffy texture
- Crumbly body
- Icy texture
- Sandy texture

**Question No.51**

Which of the following vitamins can function as antioxidant?

- C & E
- B & K
- A & C
- A & K

**Question No.52**

Recommended temperature ( $^{\circ}\text{C}$ ) for safe storage of grapes is

- 1 to 10
- 4 to 5
- 20 to 25
- 10 to 15

**Question No.53**

The ionizing radiation of 1 Kilogray (kGy) = ----- Rad

- $10^3$
- $10^5$
- $10^6$
- $10^4$

**Question No.54**

One tonne of refrigeration is equivalent to \_\_\_\_\_ kcal/min.

- 50
- 100
- 110
- 60

**Question No.55**

It is proposed to concentrate orange juice by boiling-off excess water. The relevant unit operation in this process is known as

- Distillation
- Evaporation
- Crystallization
- Drying

**Question No.56**

Yellow colour of cow milk is due to the presence of

- Quinons
- Carotene
- Lycopene
- Anthocyanin

**Question No.57**

R-134a (refrigerant) is

- Pentafluoroethane
- Dichlorodifluoromethane
- Tetrafluoroethane
- Dichloromethane

**Question No.58**

The dimensionless number in mass transfer operations which is analogous to Nusselt number in heat transfer is known as

- Lewis number
- Peclet number
- Sherwood number
- Schimdt number

**Question No.59**

Which of the following is a natural, toxicologically safe antibacterial food preservative?

- Penicillin
- Nisin
- Avidin
- Biotin

**Question No.60**

The micronutrients which can be used as fortificants in milk

- Vitamin A and K

- Vitamin A and B
- Vitamin B and K
- Vitamin A and D

**Question No.61**

A mixture of air and water vapour is adiabatically cooled. The lowest temperature of the mixture thus achieved is equal to

- Dry bulb temperature
- Wet bulb temperature
- Some other temperature
- Dew point temperature

**Question No.62**

The quantity of heat ( MJ) required to convert one kg of ice into vapour is about

- 2.53
- 3.10
- 2.26
- 1.3

**Question No.63**

One ton of refrigeration is the amount of heat required to melt 1 ton of ice at 0°C in \_\_\_\_\_ hour.

- 12
- 6
- 24
- 1

**Question No.64**

The first law of thermodynamics is a special case of

- Newton's law
- The law of heat exchange
- Law of conservation of energy
- Charle's law

**Question No.65**

The % safe moisture content of safe storage of corn is

- 16
- 18
- 15
- 13

**Question No.66**

The cheaper quality materials added to food items for more profit are called

- Adulterant
- Drug
- Preservative
- Additive

**Question No.67**

Which amino acid is essential for the growth of children?

- Methionine
- Isoleucin
- Hystidine
- Threonine

**Question No.68**

On the Celsius temperature scale, the absolute zero temperature is \_\_\_\_\_ (°C).

- 100
- 0
- 273.15
- 32

**Question No.69**

Halitosis of garlic is caused by \_\_\_\_\_

- Allyl methyl sulfide
- Allyl bromide
- Allium sativum
- Allyl isocyanide

**Question No.70**

Equilibrium relative humidity data is important when we consider the storage of

- Wet product
- Semisolid product
- Dried product
- Fresh product

**Question No.71**

Meat preservative agents are

- Nitrite and nitrate
- Acetic acid and sugar
- Citric acid and acetic acid
- Benzoic acid and sodium phosphate

**Question No.72**

\_\_\_\_\_ play a crucial role in carbohydrate metabolism.

- Vitamin D
- Iron
- Zinc
- Riboflavin

**Question No.73**

Dextrin can be produced by the action of \_\_\_\_\_ enzyme.

- Cellulase
- Protease
- Galactosidase
- Amylase

**Question No.74**

BMR stands for

- Basal metabolic ratio
- Basic metabolic ratio
- Basal metabolic rate
- Basic metabolic rate

**Question No.75**

The eyes in cheese result from ----- acid fermentation

- Lactic
- Propionic
- Malic
- Acetic

**Question No.76**

Activity slack in CPM/PERT technique is calculated by

- Latest Start time - Earliest Start time
- Latest Finish time - Earliest Start time
- Latest Finish time - Earliest Finish time
- Both a and b

**Question No.77**

\_\_\_\_\_ is a reciprocating type of pump

- Lobe pump
- Gear pump
- Diaphragm pump
- Progressive cavity pump

**Question No.78**

The tolerance limit of tetracycline content in sea food such as shrimp, as per FSSAI is \_\_\_\_\_ mg/Kg

- 0.1
- 0.05
- 0.5
- 0.01

**Question No.79**

Fructose is also known as

- Xylose
- Levulose
- Maltodextrin
- Leucose

**Question No.80**

Which of the following is the largest producer and consumer of tea in the world?

- China
- Sreelanka
- India
- West Indies

**Question No.81**

HTST pasteurization of raw milk employs a temperature of

- 62.8 °C for 30 s
- 150 °C for 20 s
- 71.7 °C for 15 s
- 100 °C for 10 s

**Question No.82**

Scalding is a \_\_\_\_\_ treatment process.

-

- Freezing
- Irradiation
- Vacuum
- Heat

**Question No.83**

One nanometer is equal to

- $10^{-9}$ cm
- $10^6$ cm
- $10^{-6}$ cm
- $10^9$ mm

**Question No.84**

Enzyme responsible for browning of cut fruits and vegetables is

- Polyphenol oxidase
- Pectin methyl esterase
- Amylase
- Catalase

**Question No.85**

Stoke's law is used to find out

- Drag coefficient
- Surface tension
- Terminal velocity
- Specific gravity

**Question No.86**

Which of the following genus is not a psychrophilic, gram negative bacteria.

- Micrococcus*
- Serratia*
- Aeromonas*
- Alcaligenes*

**Question No.87**

Who is the architect of Green revolution in India?

- Hargobind Khurana
- M S Swaminathan
- J C Bose
- V Kurien



**Question No.88**

Highest concentration of lipoxygenase is found in

- Pigeon pea
- Ground nut
- Soybean
- Chick pea

**Question No.89**

Fuel value of rice husk is about \_\_\_\_\_ Kcal/kg.

- 1000-2000
- 2500-3000
- 2000-2500
- 3000-3500

**Question No.90**

One unit of electricity is equal to

- One kilowatt
- One Horsepower
- One Horsepower-hour
- One kilowatt-hour

**Question No.91**

\_\_\_\_\_ is a salt cured pork meat.

- Ham
- Marinade
- Jerky
- Beef

**Question No.92**

The water soluble component of the gluten protein complex is

- Glutamine
- Glutenin
- Gliadin
- Globulin

**Question No.93**

Anti nutritional factor present in egg

- Hemagglutinins
- Gossypol

- Avidin
- Prussic acid

**Question No.94**

A gaseous mixture has oxygen and hydrogen in equal proportions.  
What would be the molecular weight of the mixture?

- 30
- 34
- 17
- 32

**Question No.95**

Enzyme coagulated milk product is

- Chhana
- Cheese
- Dahi
- Paneer

**Question No.96**

Selection of strapping materials depends on

- Compression and elongation
- Elongation and compression
- Tensile and elongation
- Tensile and compression

**Question No.97**

Which of the following quantities is not a scalar?

- Speed
- Pressure
- Temperature
- Momentum

**Question No.98**

Botanical name of wheat is

- Triticum durum*
- Oriza sativa*
- Triticum aestiva*
- Triticum aestivum*

**Question No.99**

The cracked grains have \_\_\_\_\_ respiratory rates than whole grains under same conditions

- Negligible
- Equal
- Higher
- Lower

**Question No.100**

Citric acid is commercially produced by

- Aspergillus niger*
- Saccharomyces cerevisiae*
- Acetobacter acetii*
- Saccharomyces rouxii*