

PART III

13 – FOOD TECHNOLOGY

(Answer ALL questions)

41. Tetany is caused by deficiency of
- Zinc
 - Selenium
 - Copper
 - Calcium
42. Which of the followings are considered as micronutrients?
- Vitamins and water
 - Mineral and protein
 - Vitamins and mineral
 - Protein and lipids
43. Excess intake of food rich in phytic acid reduces absorption of
- Folic acid
 - Protein
 - Vitamin D
 - Minerals
44. Chelating agents are used to reduce enzymatic browning of food because it reduces availability of the following cofactor
- Iron
 - Copper
 - Zinc
 - Calcium
45. Which one of the following lipid molecules exhibit emulsification property?
- Lecithin
 - Unsaturated fatty acids
 - Steroids
 - Sphingosine
46. What is the most important fatty acid for development of brain and function?
- Linoleic acid
 - Stearic acids
 - Palmitic acid
 - Docosaheptaenoic acid
47. The method of evaluating the quality of a protein is
- PDCAAS
 - PDDAC
 - PAADS
 - PCAAS
48. Hemicellulose is an example for
- Low calorie sweetener
 - Artificial sweetener
 - Homopolysaccharide
 - Heteropolysaccharide
49. Which one of the following is not the application of starch in food preparation?
- Thickener
 - Shortening agent
 - Gelling agent
 - Bulking agent
50. Low protein diet is recommended for people with following condition
- Marasmus
 - Immunodeficiency
 - Renal failure
 - Kwashiorkor

51. Which one of the following is not true about the naturally occurring colours?
 - a. Mostly stable at extreme condition during food processing
 - b. It can be isolated from plants
 - c. It can exhibit antioxidant activity
 - d. Also called as pigment
52. Which of the following methods is used to measure the water content of food?
 - a. Formol titration
 - b. Zak's method
 - c. Polarimetry
 - d. Karl Fischer titration
53. Which of the following is processing contaminants?
 - a. Mycotoxins
 - b. Aflatoxins
 - c. Nitrosamines
 - d. Scombrotoxin
54. Which of the following is a Intrinsic Parameters that affects microbial Growth?
 - a. Temperature
 - b. Water activity
 - c. Time
 - d. Atmospheric conditions
55. Proximate analysis of major components in food generally does not include
 - a. Amino acid composition
 - b. Fat
 - c. Carbohydrates
 - d. Protein
56. What is the main type of micro-organism responsible for food poisoning?
 - a. Bacteria
 - b. Mould
 - c. Virus
 - d. Parasite
57. Which of the following is not a major parameter in Sensory food evaluation?
 - a. Colour
 - b. Length of the fibre
 - c. Texture
 - d. Smell and taste
58. Which of the following is mandatory before HACCP certification?
 - a. GMP
 - b. Risk assessment
 - c. ISO 9000
 - d. ISO 22000
59. Food business including small scale or cottage or Petty food businesses whose annual turnover does not exceed Rs 12 lakhs by default falls under the purview of
 - a. Central Licensing Authority
 - b. State Licensing Authority
 - c. Registration Authority
 - d. National Certification Authority
60. Which of the following is right about Food Recall?
 - a. Call from the food industry to the consumers to visit the industry
 - b. Recalling the production methods involved in a food industry by the production manager
 - c. Action taken by a manufacturer or distributor to protect the public from products that may cause health problems
 - d. Action taken to segregate the produced food inside the industry
61. CCP in HACCP stands for
 - a. Cross contact points
 - b. Critical control points
 - c. Critical contact points
 - d. Critical certification points

62. The main objective of ISO 22000 is to
- Increase the employee productivity
 - Increase the employee morale
 - To certify the plant
 - To establish a food safety management system
63. Which is the main index organism to achieve complete safety of milk in pasteurization of milk?
- Mycobacterium tuberculosis*
 - Staphylococcus Aureus*
 - E. Coli.*
 - Listeria Monocytogenes*
64. "Date of manufacture" indicates the
- Date on which the food is procured
 - Date on which the food becomes the product as described
 - Date on which the food is placed in container in which it will be ultimately sold
 - Date on which it is packed
65. A standard practice _____, which restores nutrients that were lost in processing to near original levels.
- Ergonomics
 - Functional
 - Fortification
 - Enrichment
66. What is produced in a calf's stomach to help curdle milk and used in the production of cheese?
- chymosin
 - bacteriophage
 - antibiotic
 - pasteurization
67. Fruit juices are deaerated before allowed in to the pasteuriser is done in order to
- Reduce fouling of pasteuriser
 - Reduce oxidation deterioration
 - Increase the rate of heat transfer
 - Decrease the rate of heat transfer
68. Which of the following foods cannot be treated at high pressure?
- Bread
 - Meat
 - Fruit juice
 - Jam
69. Which of the following food preservation methods are suitable to reduce the loss of nutrients when preparing fruits and vegetables?
- Freezing
 - Using preservatives
 - Drying and blanching
 - All of the above
70. In freeze drying, removal of moisture is due to
- Boiling
 - Condensation
 - Sublimation
 - Pressure reduction
71. The water activity of the food product at the end of constant drying rate is
- Less than 1
 - Remains constant at 1
 - Equals to zero
 - Drops below 2

72. In high fructose corn syrup production, the enzyme used for the conversion of glucose to fructose is
- Isomerase
 - Invertase
 - Amylase
 - Epimerase
73. Unplanned crystallization of sugar in a confectioneries is called
- Winnowing
 - Panning
 - Fudging
 - Engrossing
74. What is the form of Iodine in Iodized Salt?
- I_2
 - KIO_3
 - KI
 - NaI
75. Tocopherol is an example of
- Anticaking agent
 - Flavouring agent
 - Antioxidant
 - None of the above
76. At which temperature frozen storage is generally operated?
- -0°C
 - -18°C
 - -50°C
 - -60°C
77. A solution is made by dissolving 1 kilo mole of solute in 2000 kg of solvent. The molality of the solution is
- 2
 - 1
 - 0.5
 - 1.5
78. A very dilute solution is prepared by dissolving ' x_1 ' mole of solute in ' x_2 ' mole of a solvent. The mole fraction of solute is approximately equal to
- x_1/x_2
 - x_2/x_1
 - $1 - (x_1/x_2)$
 - $1/x_2$
79. The increase in the temperature of the aqueous solution will result in decrease of its
- weight % of the solute
 - mole fraction of the solute
 - molarity
 - molality
80. What percent of Ca by weight is present in CaCO_3 ?
- 40
 - 48
 - 96
 - 12
81. What is the equivalent weight of Na_2CO_3 in the reaction, represented by $\text{Na}_2\text{CO}_3 + \text{HCl} \rightarrow \text{NaHCO}_3 + \text{NaCl}$?
- 53
 - 5.3
 - 106
 - 10.6
82. Multistage compressors are used in industry, because they
- reduce the cost of compressor
 - reduce the size requirement
 - resemble closely to isothermal compression
 - are easy to control

83. At which of the following conditions it is easy to control Net positive suction head (NPSH) of a centrifugal pump?
- greater than the vapour pressure of the liquid
 - less than the vapour pressure of the liquid
 - equal to the vapour pressure of the liquid
 - less than barometric pressure
84. Assuming flow to be laminar, if the diameter of the pipe is halved, then the pressure drop will
- increase
 - decrease
 - remain same
 - be quadrupled
85. Which type of pump is used for the transfer of solution of thick slurry?
- reciprocating
 - gear
 - diaphragm
 - centrifugal
86. Cavitation in a pump creates so many undesirable effects. Out of the following, which is not an undesirable effect created by cavitation?
- Decrease in effect
 - Increase in thrust
 - Develops noise
 - Develops high pressure
87. How the head loss in turbulent flow in a pipe varies?
- directly as the velocity
 - inversely as the square of the velocity
 - approximately as the square of the velocity
 - inversely as the square of the diameter
88. Power required by a centrifugal pump is proportional to (Where, D = diameter, N = rpm)
- $N^2 D^3$
 - ND^2
 - $N^2 D$
 - $N^3 D$
89. Apples are wrapped in waxed paper to
- Prevent sunlight for changing its colour
 - Prevent aerobic respiration
 - Prevent injury
 - To make it attractive
90. Which of the following is a unique example of emulsion technology?
- Butter making
 - Ice cream preparation
 - Cream separation
 - Chips making
91. In which of the following different plastics are combined to get certain desirable properties?
- Monomers
 - Plasticizers
 - Homopolymer
 - Copolymer
92. Which of the following is a secondary refrigerant?
- NH_3
 - H_2O
 - CO_2
 - R_{12}

93. Which of the following evaporators is always kept filled with liquid refrigerant?
- Plate
 - Fin and tube
 - Flooded
 - Dry expansion
94. In ball mill, at which speed there will be centrifugation?
- Operating
 - Normal
 - Critical
 - Below normal
95. If added sugar appear first or second on food label list for a packaged food, it means
- List is in alphabetical
 - Its high in sugar
 - Its low in sugar
 - Position on the list is arbitrary
96. Angle formed by pouring flour as heap on flat surface is known as
- Contact angle
 - Angle of repose
 - Angle of rip
 - Critical angle
97. In which of the following evaporators fruit juices can be concentrated?
- Long tube
 - High pressure
 - Falling film
 - Crude filter paper
98. Heat sensitive material's with high heat of vaporization may be economically separated using
- Liquid extraction
 - Distillation
 - Evaporation
 - Adsorption
99. Vertical screw mixers are used for mixing of
- High viscous liquids
 - Low viscous liquids
 - Moderate viscous fluids
 - Dry solids
100. Zero energy cool chambers work on the principle of ————— cooling.
- Hydro
 - Evaporative
 - Vacuum
 - Room