

PART III

15 – FOOD TECHNOLOGY

(Answer ALL questions)

Dietary deficiency of selenium leads to

- a. Tetany
- b. Decreases antioxidant status
- c. Inflammation of ligaments
- d. Dermatitis

Which of the followings are considered as anti-nutritional factors?

- a. Trypsin inhibitor and phytic acid
- b. Biotin and Ergosterol
- c. Oxalic acid and flavanoids
- d. Phytoestrogen and biotin

Anecephaly and neural tube defects are deficiency manifestation of

- a. Pyridoxine
- b. Biotin
- c. Folic acid
- d. Pantothenic acid

Maillard reaction occurs between

- a. Carbonyl group of the sugar and carboxyl group of the amino acid
- b. Carboxyl group of fatty acid and amino group of the amino acid
- c. Alcohol group of the sugar and carboxyl group of the amino acid
- d. Carbonyl group of the sugar and amino group of the amino acid

Which one of the following fatty acid is considered as essential fatty acid?

- a. Stearic acids
- b. Linolenic acid
- c. Palmitic acid
- d. Lauric acid

61. The ability of the fats to be spread and shaped is termed as

- a. Saponification of fats
- b. Emulsification of fats
- c. Plasticity of fats
- d. Gelling of fats

62. Which one of the following is an essential amino acid?

- a. Serine
- b. Alanine
- c. Glutamic acid
- d. Phenylalanine

63. Application of pectin in food preparation is

- a. Gelling agent
- b. Low calorie Sweetener
- c. Preservative agent
- d. Shortening agent

64. Beneficial effects of food rich in fiber are to

- a. Improve for vitamin and mineral absorption
- b. Control blood sugar levels and reduces constipation
- c. Improve for lipid and mineral absorption
- d. Increase cholesterol absorption and reduces blood sugar levels

65. Which one of the following food is a part of dietary recommendation for diabetes?

- a. Whole grains
- b. Foods rich in simple carbohydrates
- c. Highly processed foods
- d. Red meat

66. Flavors that are chemically synthesized but chemically and organoleptically identical to substances present in natural products are called as
- Natural flavoring substances
 - Artificial flavoring substances
 - Synthetic artificial flavoring substances
 - Nature-identical flavoring substances
67. Food having lowest water activity exhibits
- Decreased shelf life of food
 - More microbial growth
 - Increased shelf life of food
 - Loss of mineral
68. Methylene blue reduction test is done to test the
- Fat content of milk
 - Sugar content of milk
 - Protein content of milk
 - Bacterial activity of milk
69. GRAS stands for
- Gross rate Annual savings
 - Generally recognized as safe
 - Gross regulation for analysis and safety
 - General regulation for analysis and safety
70. Which of the following is correct regarding the Ingredients used in the Food product label?
- Shall be listed in descending order of their composition by weight or volume
 - Shall be listed in ascending order of their composition by weight or volume
 - May be listed as required by the manufacturer
 - Need not be declared
71. JECFA stands for
- Joint Expert Council on Food Admissions
 - Joint Expert Commission on Food Additives
 - Joint Expert Commerce on Food Additions
 - Joint FAO/WHO Expert Committee on Food Additives
72. Choose from the following with respect to Codex Alimentarius Commission which is right.
- It is jointly funded by the Food and Agriculture Organisation (FAO) and the World Health Organization (WHO)
 - The Codex Alimentarius covers only processed food
 - It is established in India in 1950
 - It excludes codes of hygienic practice
73. Which of the following is true about Triangle test?
- Food samples are given, out of which two are identical and the testers are required to pick out the one that is different
 - Food samples are ranked based on a individual attributes of products and they are tested
 - Samples are kept in triangles and further tested
 - Samples are displayed and out of which the identical ones are in triangular position and they are tested
74. Which of the following is determined by performing kjeldahl method?
- Fat
 - Carbohydrate
 - Protein
 - Ash

- Choose from the below what would be the first stage in HACCP system?
- Putting together a HACCP team
 - In the industry making sure everyone has the appropriate documents
 - Finalizing the product lines and distribution channels that should be included
 - Creating a flow diagram that gives a simple and clear outline of the steps involved in the food process of the company
6. Food business done through E-commerce by default falls under the purview of
- Central Licensing Authority
 - State Licensing Authority
 - Registration Authority
 - National Certification Authority
7. _____ occurs after ingestion of pathogenic bacteria and/or toxins.
- Food borne illnesses
 - Food irradiation
 - Food intoxication
 - Food recall
78. Most of the bacteria survive best at
- Alkaline pH
 - Acidic pH
 - Neutral pH
 - At all conditions
79. _____ is the action or activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level.
- Critical control point
 - HACCP
 - Control measure
 - Risk communication
80. Hydrogen peroxide is used as the preservative ion for which of the following food commodity?
- Milk
 - Meat
 - Confectionery
 - Bread
81. Carboxy methyl cellulose is used as
- Stabilizer
 - Coloring agent
 - Detergent
 - Emulsifier
82. Nitrate and nitrite is helpful in meat processing as
- Increase tenderness
 - Increase juiciness
 - Improves color
 - Prevents from microbial deterioration
83. Process of conversion of crude oil to edible oil is known as
- Purifying
 - Bleaching
 - Refining
 - Filtering
84. Tenderization of meat leads to the
- Softening of muscles
 - Retaining the color of the meat
 - Prevention from microbial deterioration
 - All of the above
85. Yellow color of cow milk is due to the presence of
- Carotene
 - Vitamin B
 - Anthocyanin
 - Xanthophyll

86. Methyl salicylate adds which kind of flavor to foods?
- chocolate
 - orange
 - wintergreen
 - pine apple
87. The addition of folic acid to foods can prevent human from developing
- heart murmurs
 - skin lesions
 - spina bifida
 - no effect
88. What is added to fruits before freezing commercially to protect quality?
- Vitamin E
 - Ascorbic acid
 - Water
 - Sugar
89. What nutrient in milk is important for cheese making?
- water
 - lactose
 - protein
 - fat
90. Which of the following metabolite does not impart flavour to beer?
- Esters
 - Thiols
 - Carbonyls
 - Alcohols
91. Name the one monosaccharide which occurs naturally in foods or beverages?
- fructose
 - lecithin
 - beta carotene
 - galactose
92. Reynolds number is the ratio of
- viscous forces to gravity forces
 - inertial forces to viscous forces
 - viscous forces to inertial forces
 - inertial forces to gravity forces
93. Froude number is the ratio of
- shear stress to gravitational stress
 - drag stress to shear stress
 - inertial stress to shear stress
 - inertial stress to gravitational stress
94. All of the following is TRUE of thixotropic processes except that they are
- isothermal
 - brought about by mechanical action
 - of high apparent viscosity
 - reversible
95. The dimension of surface tension is
- ML^{-2}
 - MT^{-2}
 - MLT^{-2}
 - $ML^{-2}T$
96. In Hagen-Poiseuille flow through a cylindrical tube, the radial profile of shear stress is
- constant
 - cubic
 - parabolic
 - linear
97. In constant pressure filtration,
- resistance decreases with time
 - rate of filtration is constant
 - rate of filtration increases with time
 - rate of filtration decreases with time

98. One kilogram of water at 0°C is changed to superheated steam of one atm pressure and 300°C . The major heat consumption in the process will be to
- heat the water from 0°C to 100°C
 - evaporate the water
 - to superheat the steam
 - data insufficient, can't be predicted
99. Rubber latex is an example of _____ fluid.
- Dilatant
 - Newtonian
 - Pseudoplastic
 - Bingham plastic
100. Very small pressure difference (< 5 mm water column) can be most conveniently measured by a/an _____ manometer.
- U-tube water
 - U-tube mercury
 - inclined tube mercury
 - inclined tube water
101. Isotonic solutions must have the same
- viscosity
 - molar concentration
 - normality
 - critical temperature
102. A gaseous mixture contains 14 kg of N_2 , 16 kg of O_2 and 17 kg of NH_3 . The mole fraction of oxygen is
- 0.16
 - 0.33
 - 0.66
 - 0.47
103. The density of a liquid is 1500 kg/m^3 . Its value in gm/liter will be equal to
- 1.5
 - 15
 - 150
 - 1500
104. Which of the following is a primary refrigerant?
- NaCl
 - H_2O
 - CaCl_2
 - NH_3
105. In a food industry, break-even point occurs when
- Annual rate of production equals assigned value
 - Total annual product cost equals total annual sales
 - Total annual profit equals expected value
 - Annual sales equal fixed costs
106. Which of the following is transportation hazard?
- Stacking
 - Dampness
 - Impact
 - Temperature and RH
107. Gases used in MAP are
- O_2 , SO_2 , CO_2
 - O_2 , CO_2 , N_2
 - CO_2 , N_2 , NH_3
 - SO_2 , NH_3 , CO_2

108. Which one of the following is not a membrane separation process?
- Distillation
 - Reverse Osmosis
 - Electrodialysis
 - Ultrafiltration
109. _____ is considered as heart of refrigeration system.
- Evaporation
 - Compressor
 - Condenser
 - Expansion valve
110. Which freezer is suitable for liquid food?
- Scraped surface
 - Plate type
 - Immersion type
 - Air plate type
111. Trickling filters are used for clarification of
- Syrups
 - Wine
 - Sewage
 - Fruit juices
112. Packaging material should be _____ to retain desirable properties of food products.
- Transparent
 - Permeable
 - Semi-permeable
 - Impermeable
113. Rigid metal containers are sterilized by using
- Hot water
 - Superheated steam
 - Hydrogen peroxide
 - Cold air
114. TDT curve is always a
- Straight line
 - Sigmoid
 - U shaped
 - L shaped
115. Texture profile is measured by using
- Viscometer
 - GC-MS
 - Textrometer
 - LC-MS