PART–B
FOOD TECHNOLOGY

51. The compound responsible for the Black Neck defect in tomato products is
    (A) Ferric Tannate
    (B) Ferrous Iodate
    (C) Copper Sulphate
    (D) Stannous oxide

52. Which of the following represent the group of saturated fatty acids?
    (A) Capric, Stearic and Oleic
    (B) Lauric, Mystic and Arachidic
    (C) Palmitic, Linoleic, Linolenic
    (D) Caprylic, Arachidonic, Butyric

53. Match the following items of group I with the items of group II in relation to the quality of fat.

    Group I

    A. Saponification number
    B. Acetyl value
    C. Reichert Meisslnumber
    D. Iodine number

    Group II

    1. Unsaturation of fatty acids
    2. Volatile water-soluble fatty acids
    3. Hydroxy fatty acid
    4. Molecular weight of fatty acid

    (A) A-1, B-2, C-3, D-4
    (B) A-4, B-3, C-2, D-1
    (C) A-4, B-1, C-2, D-3
    (D) A-2, B-4, C-3, D-1

54. Which is untrue with respect to pectin, a naturally occurring polysaccharide in fruits, in the food industry?
    (A) It forms the basis for jelly formation
    (B) Pectin with sugar and acid form gel
    (C) Pectin unstabilizes particles in orange juice and make them settle down
    (D) They are used as thickeners and stabilizers

55. In HACCP, the process of confirmation, through the provision of objective evidence, that specified requirements have been fulfilled is called as:
    (A) Validation
    (B) Verification
    (C) Updating
    (D) Corrective Action

56. In PFA under offenses in case of death or grievous injury, the following penalty is fixed.
    (A) Imprisonment of not less than 3 months, extending to 2 years and fine not less than Rs 500/-
    (B) Imprisonment of not less than 3 years, extending to life and fine not less than Rs 5,000/-
    (C) Imprisonment of not less than 6 months, extending to 2 years and fine not less than Rs 10,000/-
    (D) Cancellation of license

57. General mechanism is that an enzyme acts by:

(A) Reducing the activation energy

(B) Increasing activation energy

(C) Decreasing pH value

(D) Increasing the pH value

58. Hypoalbuminemia, hypokalemia, hypomagnesemia and fatty liver are the hallmark of

(A) Electrolyte imbalance

(B) Kwashiorkar

(C) Marasmus

(D) Viral hepatitis

59. Which of the following is not an omega-6 fatty acid?

(A) Alpha-linolenic acid

(B) Linoleic acid

(C) Eicosadienoic acid

(D) Arachidonic acid

60. Vitamin B1 coenzyme (TPP) is involved in

(A) Pyruvate oxidation

(B) Carnitine formation

(C) Urea Formation

(D) Carboxylation

61. Tomato ketchup should have the following quality standards

(A) TSS–Not less than 25%

Acidity–Not less than 1%

(B) TSS (Salt free basis)–Not less than 45%

Acidity–Not less than 3%

(C) TSS–Not less than 45%

Acidity–Not less than 3%

(D) TSS (Salt free basis)–Not less than 25%

Acidity–Not less than 1%

62. Squash can be preserved with chemical preservative provided the amount is-

(A) Not more than 350 ppm of SO_2

(B) Not more than 600 ppm of Benzoic acid

(C) Not Less than 350 ppm of SO_2

(D) (A) and (B) both

63. The use of bentonite in beverage industry is as-

(A) Clarifying agent

(B) Toughening agent

(C) Preservative

(D) None of these

64. For the juice extraction of citrus fruits, the suitable method is-

(A) Halving and Reaming

(B) Crushing and pressing

(C) Chopping and pressing

(D) None of these

65. No microbial growth can be observed in foods below the water activity (a_w)-

(A) < 0.6

(B) < 0.4

(C) < 0.5

(D) < 0.9

66. Among the following which is not an element of Risk Assessment

(A) Hazard Identification

(B) Risk Characterization

(C) Risk Management

(D) Exposure Assessment

67. The degree of methylation (DM), in high methoxy pectin is

(A) $\geq 50\%$

(B) $\leq 40\%$

(C) $\leq 50\%$

(D) $\geq 40\%$

68. The concentrations of NaOH used for cleaning of plate-type and tubular heat exchangers is

(A) 5-7%

(B) 1-5%

(C) 10%

(D) 6-8%

69. For CIP, turbulent flow rate required to clean a one-inch pipe is

(A) 24 gallons per minute

(B) 50 gallons per minute

(C) 100 gallons per minute

(D) 180 gallons per minute

70. _____ famous canned meat product has some cereal component added while processing

(A) Corned beef

(B) Luncheon meat

(C) Potted meat

(D) All of the above

71. Italian prosciutto, a specialty product is basically a

(A) Cured and smoked bacon

(B) Fermented sausage/salami (Chorizo)

(C) Wet cured and smoked ham

(D) Dry cured ham

72. _____ increases water holding capacity of meat in cured meat products

(A) Sodium ascorbate

(B) Sodium tri-polyphosphate

(C) Sodium nitrite

(D) Sugar

73. Cyclamate was banned because of following toxicity

(A) Urinary Bladder Cancer

(B) Phenylketoneuria

(C) Asthma

(D) Teratological effects

74. Regulatory bodies give approval for additives

(A) If ADI of an additive is less than EDI

(B) If its not manufactured/handled as per GMP

(C) If ADI of an additive is more than EDI

(D) If a compound is a psychotropic

75. Dielectric constant of vacuum is

(A) 1.0

(B) 0.1

(C) 1.00059

(D) 0.4192

76. Cavitations bubbles are

(A) Non stable

(B) Transient

(C) Rapidly collapsing

(D) All

77. The temperature at which any mixture melts or freeze lower than the melting point is

(A) Nucleation temperature

(B) Eutectic temperature

(C) Critical temperature

(D) Elevation in freezing point

78. The ultra violet radiation suitable for germicidal effect is

(A) 315-400 nm

(B) 200-280 nm

(C) 280-315 nm

(D) 400-450 nm

79. Significance of relative dielectric constant is to

(A) store energy

(B) conversion of electrical energy into heat

(C) dissipation of energy

(D) All

80. The penetration by MW power into food is governed by

(A) Lambert expression

(B) Attenuation factor

(C) a and b

(D) Power dissipation expression

81. What happens to bacteria in a food when the water activity is changed from 0.998 to 0.945

(A) Increase logarithmic growth

(B) Increase Lag phase

(C) Increase Stationary phase

(D) Increase death

82. Coffee extract powder with the best instant properties can be achieved by .....

(A) Osmotic dehydration

(B) Freeze concentration

(C) Freeze drying

(D) Spray drying

83. A Milk sample contaminated with Staphylococcus aureus Is Heated at 57.6°C for 22 Minutes. Which media would be used to analyze the effect of heating on the bug.

(A) Nutrient Agar

(B) EMB Agar

(C) Baird Parker agar

(D) PALCAM Agar

84. During freeze drying, the collapse temperature affects the product by :

(A) Keeping the structure intact

(B) Increasing the porosity

(C) Initiating shrinkage

(D) Retaining glassy state

85. Factors of Processing through Ultra-sonication

(A) Frequency

(B) Amplitude

(C) Time

(D) All

86. UV Technology can't be effective for preserving the

(A) Full cream milk

(B) Skimmed milk

(C) Smoothy

(D) Full cream milk and Smoothy

87. Which model explains the dynamic changes during the catalysis?

(A) Rigid template model

(B) Lock and key

(C) Both

(D) None of the above

88. The enzyme lipase should be inactivated prior to homogenization of milk?

(A) True

(B) False

(C) No effect on homogenization

(D) None of these

89. Thermal degradation of glutamine leads to the formation of____

(A) Pyrrolidone citric acid

(B) Pyrrolidone carboxylic acid

(C) Pyrrolidone acetic acid

(D) None of these

90. Which value is needed for enzyme action:

(A) Low Km

(B) Low Ki

(C) High Km

(D) High Ki

91. Test used to check the suitability of milk for pasteurization?

(A) Clot on boil test

(B) Sediment test

(C) Dye reduction test

(D) None of the above

92. Farrall index may be defined as?

(A) The number of fat globules having >2 μ in diameter.

(B) The number of fat globules having <2 μ in diameter.

(C) The number of fat globules having equal to 2 μ in diameter.

(D) None of the above

93. Rosalic acid test is used to determine the presence of?

(A) Sucrose

(B) Maltodextrin

(C) Starch

(D) Neutralizers

94. Natural acidity of milk is due to?

(A) Casein only

(B) Casein and acid phosphates

(C) Casein, acid phosphates and citrates

(D) Casein, acid phosphates, citrates and carbon dioxide

95. Dye reduction test is done to check?

(A) Chemical quality of milk

(B) Presence of neutralizers in milk

(C) Microbiological quality of milk

(D) None of the above

96. Homogenization is most efficient when?

(A) The fat phase is in a liquid state

(B) The fat is essentially solidified

(C) The fat is partially solidified

(D) Does not depend on state of fat phase

97. NOAEL and ADI are calculated on the basis of .....

(A) Subchronic Toxicity studies

(B) Subacute Toxicity studies

(C) Chronic Toxicity studies

(D) Acute Toxicity studies

98. Prions are a type of:

(A) Viruses

(B) Proteinacious particles

(C) Yeast-like particles

(D) Viroids

99. Hemorrhagic colitis and hemorrhagic uremic syndrome is associated with disease caused by …….. causative agent

(A) Salmonella typhimurium

(B) Shigella boydii

(C) Campylobacter jejuni

(D) Escherichia coliO157:H7

100. 'Lux gene' is used in which rapid method out of the following

(A) ATP bioluminescence

(B) Fiber Optics biosensors

(C) Bacterial bioluminescence

(D) Surface Plasmon resonance sensor

ROUGH WORK

Answer Key: Food Technology

Q No	Answer
51	A
52	B
53	B
54	C
55	B
56	B
57	A
58	B
59	A
60	A
61	D
62	D
63	A
64	A
65	A
66	C
67	A
68	B
69	A
70	B
71	D
72	B
73	D
74	C
75	A

Q No	Answer
76	D
77	B
78	B
79	A
80	C
81	B
82	C
83	C
84	C
85	D
86	D
87	D
88	A
89	B
90	B
91	A
92	B
93	D
94	D
95	C
96	A
97	C
98	B
99	D
100	A