M.E. (Food Technology)

1. Most preferred material of construction in food processing equipments:
(A) Stainless steel (B) High carbon steel
(C) Copper (D) Aluminium

2. The dimensions of A2×1/2 Can is expressed as:
(A) 401×411 (B) 603×700
(C) 301×411 (D) 211×411

3. The thermal diffusivity is expressed as:
(A) m/s (B) Pa.s
(C) m^2/s (D) Dimensionless number

4. Food laws are essential to:
(A) Control food poisoning (B) Limit the sale of sub standard products
(C) Promote the health products (D) All of the above

5. The law governing the cream separation in milk is:
(A) Newtons law (B) Bernoullis law
(C) Stokes law (D) Ficks law

6. The unit of viscosity is expressed as:
(A) erg (B) Pa
(C) $N.s/m^2$ (D) N.s

7. Jelly may be classified as:
(A) Newtonian (B) Solid
(C) Viscoelastic (D) None of the above

8. Which one of these technologies are useful for removal of microbes only from surfaces of the foods?
(A) Infrared heating (B) Microwave
(C) High pressure processing (D) UV light

9. The SI units of force is:
(A) $m.kg.s^{-2}$ (B) $mol.kg.s^{-1}$
(C) $m2.kg.s^{-1}$ (D) None of the above

10. Solvent extraction of oil follow
(A) Diffusion process (B) Leaching
(C) Centrifugation (D) Osmosis

11. Y = exp (-k t) is a:
(A) Linear equation (B) Non-linear equation
(C) Quadratic equation (D) Polynomial equation

12. Which one is not a food packaging material
(A) Polyethylene (B) Polypropylene
(C) Bi-axially oriented Polypropylene (D) Acetylene

13. China, India, Indonesia, Bangladesh are major producer of

(A) Mango (B) Poultry

(C) Rubber (D) Paddy

14. Animal fat is extracted by

(A) Distillation (B) Mechanical extraction

(C) Rendering (D) None of the above

15. The most heat resistant microorganism is

(A) Str. cremoris (B) Saccharomyces cerevase

(C) Lactobacillus bulgaricus (D) Clostridium botulinum

16. Potassium metabisulfite in processed food acts as

(A) Antioxidant (B) Preservative

(C) Color additive (D) Favoring compound

17. Lecithin is the by-product of

(A) Sugar industry (B) Wine industry

(C) Oil industry (D) Meat industry

18. Hedonic test pertains to:

(A) Total solids evaluation (B) Total soluble solids evaluation

(C) Sensory evaluation (D) Total size evaluation

19. Bulging of can is due to

(A) H_2 gas production (B) Expansion of food product

(C) N_2 production (D) CO_2 production

20. Maillard browning is due to

(A) Non-enzymatic browning (B) Reaction of amino acid and sugar

(C) Reaction of glucose and amino acid (D) All of the above

21. Which of the following analytical methods can be used to distinguish flavor compounds?

(A) Polarimetry (B) Gas chromatography

(C) Spectroscopy (D) Hydrometry

22. Chemical name of pectin is

(A) Methoxyl ester of poly-galactouronic acid (B) Methyl ester of poly-galactouronic acid

(C) Methyl ester of glutamic acid (D) Methoxyl ester of glutamic acid

23. Caffeine is absent in

(A) Tea (B) Coffee

(C) Fresh fruit juice (D) Cola drinks

24. Heat sensitive foods should preferably be processed:

(A) Below atmospheric pressure (B) At atmospheric pressure

(C) Above the atmospheric pressure (D) None of these

25. The Reynolds number for turbulent fluid flow in a pipe is:

(A) Less than 2100 (B) Greater than 2100

(C) Greater than 4000 (D) Greater than 10,000

26. 80^{o}C is equal to:

(A) 156F (B) 166F

(C) 176F (D) 186F

27. One atmospheric pressure is equal to:

(A) 100.325 kPa (B) 101.325 kPa

(C) 1 kPa (D) 1000 kPa

28. Which of the following process results in least residual oil content in oil bearing materials:

(A) Ghani (B) Expeller

(C) Solvent extraction (D) Hydraulic press

29. Drying takes place only when dry bulb temperature of hot air is:

(A) Less than its wet bulb temperature (B) Equal to its wet bulb temperature

(C) Greater than wet bulb temperature (D) Zero

30. Various properties of air vapour mixture are given in

(A) P-V chart (B) Hasley's Chart

(C) Psychrometric Chart (D) None of these

31. Which of the following is a non-distilled beverage:

(A) Rum (B) Whisky

(C) Brandy (D) Beer

32. PET is:

(A) Polyethylene terepthalate (B) Para ethyl toluene

(C) Poly ethylene tube (D) None of the above

33. 'Yield stress' term is related with

(A) Leaching (B) Rheology

(C) Newtonian fluids (D) Solids

34. Which one of them is a gram positive bacteria?

(A) Pseudomonas (B) Salmonella

(C) Proteus (D) Bacillus

35. The SPC per ml of the pasteurized milk should be:

(A) Less than 10000 (B) Less than 20000

(C) Less than 30000 (D) Less than 40000

36. The current production of wheat in India is approximately:

(A) 200 million tonnes (B) 300 million tonnes

(C) 50 million tonnes (D) 98 million tonnes

37. *C. botulinum* does not grow in foods having pH below:

(A) 4.0 (B) 4.6

(C) 5.0 (D) 5.5

38. Parboiling of rice is a :

(A) Thermal treatment (B) Blanching treatment

(C) Pressure treatment (D) Hydrothermal treatment

39. Viscosity of water is:

(A) 1 mPa.s (B) 100 mPa.s

(C) 1 MPa.s (D) 100 MPa.s

40. The SI units of measurement is:

(A) ft, lb, s, ^{o}F (B) cm, g, s, ^{o}C

(C) m, kg, s, K (D) m, kg, s, ^{o}C

41. Kitchen-top microwave oven operates at:

(A) 915 MHz (B) 9150 MHz

(C) 245 MHz (D) 2450 MHz

42. Water activity of foods during constant rate of drying is:

(A) =1 (B) <1

(C) >1 (D) 0

43. Recommended dryer for strawberry is:

(A) Tray dryer (B) Fluidized bed dryer

(C) Deep bed dryer (D) Freeze dryer

44. Activation energy is computed using:

(A) Fick's law (B) Arrhenius law

(C) Fourier's law (D) Charl's law

45. Activation energy is expressed in:

(A) kJ/mol (B) kJ/kg

(C) kJ/L (D) kJ/mol.K

46. Pasteurization of milk is carried out to

(A) Destroy all microorganisms (B) Destroy all pathogens

(C) Destroy (D) Delay growth of microorganisms

47. Ratio of convective heat transfer to heat transfer due to conduction is

(A) Reynolds number (B) Nusselt number

(C) Prandtl number (D) Grasshoff number

48. Ratio of molecular diffusivity of momentum to molecular diffusivity of heat is

(A) Reynolds number (B) Nusselt number

(C) Prandtl number (D) Grasshoff number

49. Mango is

(A) Climacteric fruit (B) Non-Climacteric fruit

(C) Both Climacteric & Non-Climacteric fruit (D) None of these

50. Following gas is responsible for ripening of fruits

(A) Oxygen (B) Carbon dioxide

(C) Nitrogen (D) Ethylene

51. The power consumed by a drum dryer depends upon:

(A) Durm speed (B) Steam pressure

(C) Pressure exerted by the blade on the drum (D) Length and diameter of the drum

52. Ultrafiltration is used for production of

(A) Butter (B) Ghee

(C) Cheese (D) Icecream

53. The products of fermentation of sugar are ethanol and

(A) Water (B) Oxygen

(C) Carbon dioxide (D) Sulphur dioxide

54. The water activity of the dried food product is approximately

(A) 1.0 (B) 0

(C) 0.92 (D) 0.65

55. The unit of overall heat transfer coefficient is

(A) $W/m^2.K$ (B) W/m^2

(C) $J/m^2.K$ (D) J/m^2

56. Tomato ketchup may be classified as:

(A) Newtonian (B) Non-Newtonian

(C) Viscoelastic (D) None of the above

57. Which one of these technologies operate at lowest frequency?

(A) Microwave (B) Radiofrequency

(C) Ultra-violet (D) None of the above

58. Moisture content of bread (wet basis) is approximately

(A) 12% (B) 20%

(C) 38% (D) 17%

59. If atmospheric- and dew point- temperatures are equal, then the relative humidity is

(A) Almost 100% (B) 0

(C) 50% (D) Unpredictable

60. What type of wheat is suitable for pasta manufacturing?

(A) Hard wheat (B) Soft wheat

(C) Durum wheat (D) Mixture of a, b and c

61. The manometer is used to measure:

(A) Fluid velocity (B) Fluid density

(C) Fluid pressure (D) Fluid viscosity

62. Raw material used for the preparation of Sake is:

(A) Wheat (B) Rice

(C) Corn (D) Barley

63. Preservative action of sugar in food is due to:

(A) Its affinity towards moisture (B) Greater osmotic pressure

(C) Reduced osmotic pressure (D) Sweetening effect

64. Component responsible for bitterness in orange is

(A) Limoniene (B) Lycopene

(C) Tannin (D) Peroxidase

65. Deodarisation of oil is carried out by

(A) Steam distillation (B) Evaporation

(C) Fractionation (D) Drying

66. Aerated candy is

(A) Chocolate (B) Hard boiled candy

(C) Lollypop (D) Cotton candy

67. Straight dough method is used in

(A) Deep fat frying (B) bread making

(C) Freeze drying (D) Sterilization

68. Oleic acid is

(A) Unsaturated fatty acid (B) C-18 fatty acid

(C) Present in oil (D) All of the above

69. Which of the following chemicals is a solvent used for testing fat content?

(A) Hydrochloric acid (B) Toluene

(C) Water (D) Petroleum ether

70. Wij's reagent is used for determination of

(A) Iodine number (B) Peroxide value

(C) Acid number (D) Saponification value

71. Oxidative rancidity follow

(A) Free radical mechanism (B) Surface reaction

(C) Oxidation -reduction reaction (D) All the above

72. C_{16} fatty acid is

(A) Myristic acid (B) palmitic acid

(C) Oleic acid (D) None of the above

73. Brilliant blue is a food grade

(A) Color (B) Flavor

(C) Emulsifier (D) Bleaching agent

74. Dewaxing is essential for

(A) Margarine (B) Vanaspati

(C) Chocolate (D) Salad dressing

75. Example of essential amino acid

(A) Alanine (B) Phenyl alanine

(C) Glycine (D) All the above

x-x-x