

Q1. Number of degrees required for a specific thermal death time curve to pass through one log cycle is

- a) F value
- b) z value
- c) D value
- d) t value

Q2. Specific heat of orange juice concentrate having total solids of 38% is

- a) 0.60 BTU/(lb.°F)
- b) 0.69 BTU/(lb.°F)
- c) 0.75 BTU/(lb.°F)
- d) 0.50 BTU/(lb.°F)

Q3. Theories of shear thinning behavior are

- a) Power law model
- b) Herschel-Bulkley model
- c) Both of them
- d) None of them

Q4. The properties of viscoplastic material that behaves as a rigid body at low stress but flows at high stress

- a) Bingham plastic
- b) Dilatant
- c) Newtonian
- d) None of the above

Q5. Which of following has excellent resistance to insect penetration

- a) Kraft paper
- b) Polyethylene
- c) Polycarbonate
- d) None of these

Q6. Chakka is intermediate product of

- a) Shrikhand
- b) Khoa
- c) Rabri
- d) Malai

Q7) Which one is non-climacteric fruit

- a) Mango
- b) Banana
- c) Apple
- d) Orange

Q8) Particle size of drum dried milk powder is----- μm

- a) 10-250
- b) 10-20
- c) 8-20
- d) 20-40

Q9) Which of following is a high barrier film for MAP

- a) EVOH
- b) PVC
- c) Acrylonitrile
- d) all of these

Q10) Which of the following is typical example of retortable laminate:-

- a) PE/Al foil/PP
- b) Nylon/PE/PE
- c) Al foil/Paper/Nylon
- d) None of these

Q11) The moisture content of bread is in the range of

- a) 20%
- b) 40%
- c) 55%
- d) None of these

Q12) ----- is the oxidising agent used in bakery industry

- a) Ascorbic acid
- b) L-cysteine
- c) Glutathione
- d) Sodium metabisulphite

Q13) In mixographs, suitable mixing time for biscuit and cookie making is

- a) <1min
- b) <3 min
- c) 5-6 min
- d) None of the above

Q14) Fruit product order was made in the year

- a) 1958
- b) 1962
- c) 1955

d) 1967

Q15) The smallest size of the starch granules are found in

- a) Corn
- b) Potato
- c) Rice
- d) Chickpea

Q16) Which of these starches has C type X ray crystalline patterns

- a) Corn
- b) Wheat
- c) Mung bean
- d) None of these

Q17) Which of the following are regulatory proteins of myofilaments

- a) Actin
- b) Troponin
- c) Both a and b
- d) None of the above

Q18) During conversion of muscle to meat, the ultimate pH of muscle is

- a) 6.2 to 6.3
- b) 5.9-6.0
- c) 5.3-5.7
- d) None of the above

Q19) Water holding capacity of fresh meat can be visualized in terms of

- a) Net charge effect
- b) Steric effect
- c) Both of the above
- d) None of the above

Q20) The pigment of muscle is

- a) Hemoglobin
- b) Myoglobin
- c) Chlorophyll
- d) None of the above

Q21) Which atomizer can be used for spray drying egg white

- a) Pressure spray nozzle
- b) Centrifugal spinning disc
- c) Both of them
- d) None of them

Q22) Despite high inlet temperature of spray drier, the dried product is not damaged due to

- a) Thermoplasticity

- b) Evaporative drying
- c) Evaporative cooling
- d) None of the above

Q23) Vacuum condition maintained in freeze drier is usually within the range

- a) 0.1-2 mm Hg
- b) 2.1-3 mm Hg
- c) 3.1-4 mm Hg
- d) None of the above

Q24) The conditions maintained in multiple effect evaporators are (V is vacuum, T is temperature; 1, 2, and 3 are 1st, 2nd, and 3rd Evaporator)

- a) $V_1 < V_2 < V_3$ and $T_1 > T_2 > T_3$
- b) $V_1 > V_2 > V_3$ and $T_1 < T_2 < T_3$
- c) $V_1 < V_2 > V_3$ and $T_1 > T_2 < T_3$
- d) $V_1 > V_2 < V_3$ and $T_1 < T_2 < T_3$

Q25) The freezing conditions should promote

- a) Formation of large size ice crystal
- b) Formation of small size ice crystal
- c) Ice crystal size do not matter
- d) All of the above are true

Q26) Thermal analysis of food can be done by

- a) DSC
- b) TGA
- c) DTA
- d) All of the above

Q27) Ultrafiltration membrane allows the passage of

- a) Proteins
- b) Sugars
- c) None of the above
- d) Both a and b can pass

Q28) Intermediate moisture foods have moisture in the range between

- a) 10-20%
- b) 20-50%
- c) 20-70%
- d) 30-60%

Q29) The minimum water activity (A_w) required for the growth of bacteria is

- a) 0.65
- b) 0.75
- c) 0.8
- d) 0.9

- Q30) In intermediate moisture foods which microorganism can cause spoilage
- a) Bacteria
 - b) Mold
 - c) Virus
 - d) All can spoil
- Q31) The pH condition required for the growth of *Clostridium botulinum* is
- a) 5 or below
 - b) 4.9 or below
 - c) 4.6 or below
 - d) 4.0 or below
- Q32) Which of these have more protective effect on microorganisms during heating
- a) Starch
 - b) Protein
 - c) Moisture
 - d) Fats
- Q33) For food applications, the approved microwave frequency is
- a) 2400 MHz
 - b) 2450 MHz
 - c) 2480 MHz
 - d) 2520 MHz
- Q34) Which of these are more resistant to food irradiation
- a) Bacteria
 - b) Mold
 - c) Virus
 - d) Enzymes
- Q35) The problem in using X rays for food preservation is
- a) More penetration power
 - b) It cannot easily be focused
 - c) Less penetration power
 - d) None of the above
- Q36) Malt is not used in making
- a) Ale
 - b) Stout
 - c) Sake
 - d) Pilsner
- Q37) Which is not a kind of microscopy
- a) SEM
 - b) TEM

- c) X-ray microscopy
- d) TGA

Q38) Starch is mainly isolated from which source

- a) Rice
- b) Wheat
- c) Mung bean
- d) Corn

Q39) The instrument used for measuring heavy metals in foods are

- a) Atomic absorption spectrophotometer
- b) ICP-OES
- c) Both of them
- d) None of them

Q40) HPLC can be used to detect ----- in food

- a) Amino acids
- b) Pesticides residues
- c) Both of them
- d) None of them

Answer Keys:-

1. b

2. b

3. c

4. a

5. c

6. a

7. d

8. c

9. d

10. a

11. b

12. a

13. b

14. c

15. c

16. c

17. b

18. c

19. c

20. b

21. b

22. c

23. a

24. a

25. b

26. d

27. b

28. b

29. d

30. b

31. c

32. d

33. b

34. d

35. b

36. c

37. d

38. d

39. c

40. c