Dairy Technology-Multiple Choice Questions

1. What is the principal carbohydrate in the milks of all mammals?
   a. Lactose
   b. Glucose
   c. Sucrose
   d. Fructose

2. Percentage of water in buffalo milk is:-
   a. 65-67 %
   b. 70-75 %
   c. 80-85 %
   d. 87-90 %

3. Soft fats in milk fat are:-
   a. Lauric & Stearic
   b. Capric & Lauric
   c. Oleic & Butyric
   d. Oleic & Lauric

4. Principal protein in milk is:-
   a. Albumin
   b. Lactalbumin
   c. Casein
   d. Lactoglobulin

5. Percentage of mineral matter in milk is about :-
   a. 1 %
   b. 0.7 %
   c. 1.5 %
   d. 0.05 %

6. Whey is the by-product in the manufacture of:-
   a. Skimmed milk
   b. Butter
   c. Cheese
   d. Yogurt

7. Example of soft cheese is:-
   a. Cheddar
   b. Swiss
   c. Brick
   d. Cottage

8. Which one of the following is not fermented beverages?
   a. Kefir
   b. Leban
   c. Buttermilk
   d. Kaumiss

9. How many indigenous enzymes have been reported in bovine milk?
   a. 30
10. Destruction of which enzyme is used as an index of super-HTST pasteurization?
   a. Catalase
   b. Lipase
   c. Lactoperoxidase
   d. All of the above

11. Rennet belongs to:-
   a. Lipases
   b. Catalase
   c. Proteinases
   d. Phosphatases

12. Temperature used in UHT treatment is:-
   a. 90-100 °C
   b. 100-120 °C
   c. 120-125 °C
   d. 130-140 °C

13. Lactose is disaccharide containing:-
   a. Glucose & Fructose
   b. Glucose & Glactose
   c. Glucose & Glucose
   d. Glucose & Maltose

14. CaCl₂ is added at the rate of:-
   a. 0.5 %
   b. 0.8 %
   c. 0.02 %
   d. 0.08 %

15. Which one is used as an emulsifying agent in process cheese blend?
   a. Paprika
   b. Pectin
   c. Glycerides
   d. Whay Powder

16. Milk is an emulsion :-
   a. Oil-in-Water
   b. Water-in-Oil
   c. Oil-in-Oil
   d. Oil-in-Starch

17. Normal bovine milk contains protein about
   a. 7.5%
   b. 5.5%
   c. 3.5%
   d. 9.5%

18. The aim of pasteurization milk is to:-
a. Improve flavor  
b. Kill disease producing organisms  
c. Improve color  
d. None of the above  
19. People with high blood pressure or edema are advised to take:--  
a. Multivitamin Mineral Milk  
b. Low Sodium Milk  
c. Sterile Milk  
d. Low Lactose Milk  
20. Evaporated milk is concentrated to approximately what times the solid of normal whole milk?  
a. 2.25 times  
b. 6.25 times  
c. 7 times  
d. 8.5 times  
21. 10-15 % more milk is produced with which growth hormones, if injected to lactating cows?  
a. Auxin  
b. Bovine Growth Hormone  
c. Ethylene  
d. None of the above  
22. The process to increase in volume caused by whipping air into the ice cream mix during freezing is called?  
a. Homogenization  
b. Aging  
c. Overrun  
d. Hardening  
23. Semisolid ice cream is placed in a hardening room at a temperature of about?  
a. -15 °C  
b. -20 °C  
c. -34 °C  
d. -44 °C  
24. The “eyes” in swiss cheese are formed by the growth of:-  
a. Leuconostoc  
b. Propionibacterium  
c. Streptococcus  
d. Lactobacillus  
25. Yogurt contains mixed lactic acid culture containing:-  
a. Lactobacillus bulgaricus and Streptococcus thermophilus  
b. Lactobacillus bulgaricus and Propionibacterium  
c. Lactobacillus bulgaricus and Leuconostoc  
d. None of the above  
26. The melting point of milk fat varies normally between:--  
a. 32-36 °C  
b. 40-45 °C
c. 20-25 °C
d. 26-30 °C

27. The specific gravity of milk fat at 21°C is?
   a. 0.70
   b. 0.82
   c. 0.93
   d. 0.98

28. The iodine number measures the amount of:-
   a. Free Fatty Acids
   b. Saturated Fatty Acids
   c. Chain Length of Fatty Acids
   d. Unsaturated Glycerides

29. Milk fat differs from other common fats in having a larger percentage of:-
   a. Free Fatty Acids
   b. Saturated Fatty Acids
   c. Volatile Fatty Acids
   d. None of the above

30. Sponification number of butter fat is:-
   a. 190
   b. 195
   c. 210
   d. 231

31. Energy value of milk having 3.5% fat according to Sharp’s Formula will be?
   a. 60
   b. 60.5
   c. 62.5
   d. 65.5

32. Lactose reduces copper salt to?
   a. Cupric Oxide
   b. Cuprous Oxide
   c. Copper Oxide
   d. None of the above

33. Yellow color of milk fat is due to presence of?
   a. Vitamin D
   b. Carotinoids
   c. Calcium
   d. Folic Acid

34. Tests for proper pasteurization are based on the activity of which enzyme?
   a. Lactase
   b. Diastase
   c. Phosphatase
   d. Catalase

35. Starch is split by which enzyme?
   a. Lactase
   b. Diastase
c. Phosphatase
d. Catalase

36. What is freezing point of milk?
   a. 0 °C
   b. -0.55 °C
   c. -1 °C
   d. -1.55 °C

37. What is the average boiling point of milk?
   a. 100-101 °C
   b. 105-110 °C
   c. 115-117 °C
   d. 102-105 °C

38. What is the average specific gravity of normal whole milk at 16 °C?
   a. 0.903
   b. 1.032
   c. 1.582
   d. 2.032

39. Which is the pre-dominating organism in dirty utensils of milk?
   a. Lactobacillus bulgaricus
   b. Propionibacterium
   c. Streptococcus lactis
   d. All of the above

40. Energy value of a food is measured in terms of?
   a. Carbohydrates
   b. Fats
   c. Proteins
   d. Calories

41. Legal butter must contain at least what percentage of fat?
   a. 70 %
   b. 80 %
   c. 90 %
   d. 95 %

42. The high nutritive value of cheese is due to:-
   a. High mineral contents
   b. High protein contents
   c. Taste & flavor
   d. All of the above

43. Food value of ice cream depends to a large extent on its?
   a. Flavor
   b. Volume
   c. Composition
   d. None of the above

44. Chlorine compounds have widespread acceptance in the dairy industry due to?
   a. Non-toxicity
   b. High sanitizing efficiency
c. High corrosiveness  
d. All of the above

45. At what concentration chlorine sanitizing solutions are usually used in the dairy industry?  
   a. 50-100 ppm  
   b. 100-200 ppm  
   c. 200-500 ppm  
   d. 500-800 ppm

46. The process of raising or lowering the percent of fat in milk or cream to a desired standard is called?  
   a. Enrichment  
   b. Fortification  
   c. Standardization  
   d. None of the above

47. A product consisting of a mixture of milk and cream which contains not less than 10.5% milk fat is called?  
   a. Concentrated Milk  
   b. Low Fat Milk  
   c. Half-and–Half  
   d. Eggnog

48. Butter milk is a fluid product resulting from the manufacture of?  
   a. Cheese  
   b. Yogurt  
   c. Ice cream  
   d. Butter

49. What is the application of any effective method or substance to a clean surface for destruction of pathogen is called?  
   a. Pasteurization  
   b. High Temperature Treatment  
   c. Sanitization  
   d. Cleaning

50. In what form Formaldehyde- preservatives used in milk exists?  
   a. Gas  
   b. Liquid  
   c. Solid  
   d. All of the above

51. Mammary gland’s complete unit of milk synthesis of is called  
   a. lumen  
   b. micelles  
   c. alveolus  
   d. secretary cells

52. Fatty acids synthesized in mammary gland are  
   a. Higher chain fatty acids  
   b. Unsaturated fatty acids  
   c. Lower chain fatty acids
d. Medium and lower chain fatty acids

53. Most variable constituent of milk is
   a. proteins
   b. fat
   c. lactose
   d. minerals

54. Which of the following has largest particle size in milk?
   a. lactose
   b. casein micelles
   c. fat globule

55. Lactose has water solubility of
   a. 100%
   b. 50%
   c. 18%
   d. 25%

56. Which enzyme is tested for cream pasteurization?
   a. Plasmin
   b. Phosphatas
   c. Catalase
   d. peroxidase

---

**ANSWERS**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a</td>
<td>15. c</td>
<td>29. c</td>
<td>43. c</td>
</tr>
<tr>
<td>2. d</td>
<td>16. a</td>
<td>30. d</td>
<td>44. b</td>
</tr>
<tr>
<td>3. c</td>
<td>17. c</td>
<td>31. b</td>
<td>45. c</td>
</tr>
<tr>
<td>4. c</td>
<td>18. b</td>
<td>32. b</td>
<td>46. c</td>
</tr>
<tr>
<td>5. b</td>
<td>19. b</td>
<td>33. b</td>
<td>47. c</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>6</td>
<td>c</td>
<td>20</td>
<td>a</td>
</tr>
<tr>
<td>7</td>
<td>d</td>
<td>21</td>
<td>b</td>
</tr>
<tr>
<td>8</td>
<td>c</td>
<td>22</td>
<td>c</td>
</tr>
<tr>
<td>9</td>
<td>b</td>
<td>23</td>
<td>c</td>
</tr>
<tr>
<td>10</td>
<td>c</td>
<td>24</td>
<td>b</td>
</tr>
<tr>
<td>11</td>
<td>c</td>
<td>25</td>
<td>a</td>
</tr>
<tr>
<td>12</td>
<td>d</td>
<td>26</td>
<td>a</td>
</tr>
<tr>
<td>13</td>
<td>b</td>
<td>27</td>
<td>c</td>
</tr>
<tr>
<td>14</td>
<td>c</td>
<td>28</td>
<td>d</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>c</td>
<td>34</td>
<td>c</td>
</tr>
<tr>
<td>35</td>
<td>b</td>
<td>35</td>
<td>b</td>
</tr>
<tr>
<td>36</td>
<td>b</td>
<td>36</td>
<td>b</td>
</tr>
<tr>
<td>37</td>
<td>a</td>
<td>37</td>
<td>a</td>
</tr>
<tr>
<td>38</td>
<td>b</td>
<td>38</td>
<td>b</td>
</tr>
<tr>
<td>39</td>
<td>c</td>
<td>39</td>
<td>c</td>
</tr>
<tr>
<td>40</td>
<td>d</td>
<td>40</td>
<td>d</td>
</tr>
<tr>
<td>41</td>
<td>b</td>
<td>41</td>
<td>b</td>
</tr>
<tr>
<td>42</td>
<td>b</td>
<td>42</td>
<td>b</td>
</tr>
<tr>
<td>48</td>
<td>d</td>
<td>48</td>
<td>d</td>
</tr>
<tr>
<td>49</td>
<td>c</td>
<td>49</td>
<td>c</td>
</tr>
<tr>
<td>50</td>
<td>a</td>
<td>50</td>
<td>a</td>
</tr>
<tr>
<td>51</td>
<td>c</td>
<td>51</td>
<td>c</td>
</tr>
<tr>
<td>52</td>
<td>c</td>
<td>52</td>
<td>c</td>
</tr>
<tr>
<td>53</td>
<td>b</td>
<td>53</td>
<td>b</td>
</tr>
<tr>
<td>54</td>
<td>c</td>
<td>54</td>
<td>c</td>
</tr>
<tr>
<td>55</td>
<td>c</td>
<td>55</td>
<td>c</td>
</tr>
<tr>
<td>56</td>
<td>d</td>
<td>56</td>
<td>d</td>
</tr>
</tbody>
</table>