

1. The most prevalent off-flavor in fluid milk is _____.
*A feed
B malty
C flat
D oxidized

2. Butter is made from milk and/or cream and must contain a minimum of _____ percent fat.
A 20
*B 80
C 50
D 5

3. Osteoporosis may be reduced by consuming adequate quantities of milk and/or milk products. Osteoporosis is the _____.
A development of a hard calloused layer of skin on the sole of the foot
B inflammation of the skin cells causing hair loss and scaling of the skin
C deterioration of the soft tissue in the retina, leading to blurry vision and poor eye sight
*D loss of bone mass due to decrease in the bone matrix and minerals

4. A five day seven degree shelf life test does not check for _____.
A meaningful data for control applications
*B lower variability among cartons of milk
C psychotropic bacteria reproduces at the this temperature
D the temperature at or near the maximum for milk storage

5. An example of an extra hard cheese is _____.
A ricotta
*B parmesan
C brie
D muenster

6. The highest production month for ice cream is _____.
A August
B September
*C June
D March

7. The top ten milk producing states in the U.S. account for over _____ percent of the total milk production.
A 53
B 69
*C 73
D 59

8. To remove fat from milking equipment an _____ is used.
*A alkaline cleaner in hot water
B acid cleaner in cold water
C acid cleaner in hot water
D alkaline cleaner in cold water

9. Rubber parts readily absorb _____ and need to be cleaned in an alkaline detergent.
- A protein
 - B carbohydrates
 - C minerals
 - *D milk fat**
10. Total cheese production in the U.S. reached almost _____ pounds in 2015.
- A 20 billion
 - B 15 billion
 - *C 12 billion**
 - D 20 million
11. The correct primary taste sensation/causal agent combination is _____.
- A salty-sugar
 - B sour-table salt
 - C sweet-lactic acid
 - *D bitter-quinine**
12. Pasteurization is the process of heating every particle of milk and milk product to the minimum required _____ and holding it continuously for the minimum required _____ in equipment that is properly designed and operated.
- A time and temperature
 - B time and length
 - C temperature and length
 - *D temperature and time**
13. The _____ is a test for rancidity.
- *A acid degree value**
 - B cryoscope
 - C disc assay
 - D titratable acidity
14. Low-fat yogurt must have a minimum of _____ percent fat and a maximum of _____ percent fat.
- A 1, 3.25
 - B 1, 4
 - *C .5, 2**
 - D .5, 2.5
15. The USDA food guide changed from a pyramid to a plate. When comparing the plate to the previous pyramid, _____ are not specifically represented by their own category.
- A grains
 - B dairy
 - *C meats**
 - D vegetables
16. The most popular retail size container for fluid milk in the U.S. is a _____.
- A quart
 - *B gallon**
 - C liter
 - D half gallon

17. _____ is not normally in the top 3 states in milk production per cow per year.
- *A **Indiana**
 - B Arizona
 - C Colorado
 - D Washington
18. Compared to a Holstein cow, the average Jersey cow produces _____ on a per-gallon of milk basis.
- *A **more fat and total milk solids**
 - B more fat but less total milk solids
 - C less fat but more total milk solids
 - D less fat and total milk solids
19. Infectious mastitis microorganisms almost invariably gain entrance to the mammary gland via a _____.
- A blind quarter
 - B suspensory ligament
 - *C **streak canal**
 - D caudal base
20. The two most common tests for determining milk quality are the _____ test.
- A standard plate count and color
 - B flavor and titratable acidity
 - C somatic cell count and odor
 - *D **somatic cell count and standard plate count**
21. The largest increase in per capita consumption of all dairy products in the U.S. was that of _____.
- *A **yogurt**
 - B low fat milk
 - C cheese
 - D ice cream
22. Adulterants of milk that are detrimental to human health are _____.
- A proteins
 - *B **pesticides**
 - C minerals
 - D water
23. Five countries accounted for approximately _____ percent of the total U.S. dairy exports.
- A 69
 - *B **59**
 - C 39
 - D 79
24. The major reason milk from cows treated with antibiotics must be withheld from the milk supply is because _____.
- A antibiotics increase the somatic cell count of milk
 - B antibiotics kill some of the good bacteria found in milk
 - *C **some humans are sensitive to antibiotics**
 - D antibiotics cause an off-flavor in milk
-

25. _____ dominate U.S. cheese production.
- A New York and Wisconsin
 - *B Wisconsin and California**
 - C Texas and Florida
 - D Texas and California
26. Approximately _____ percent of the total frozen dessert market is ice cream (both hard and soft).
- A 92
 - *B 86**
 - C 66
 - D 33
27. A bulk milk hauler detected a sour odor from the raw milk in a farm bulk tank. Upon further examination he/she is likely to find _____.
- A butter particles floating on the milk
 - B a high freezing point of the milk
 - *C a high titratable acidity**
 - D the milk has been exposed to a sanitizer
28. The top three milk producing states for 2012 were _____.
- A California, Wisconsin, and New York
 - *B California, Wisconsin, and Idaho**
 - C Illinois, California, and Wisconsin
 - D Missouri, Illinois, and Wisconsin
29. The two main proteins in milk are _____ and _____.
- *A casein, lactalbumin**
 - B ascorbic, thiamin
 - C lactose, lactalbumin
 - D colgate, casein
30. To reduce the feed flavor in milk to acceptable levels, cows should be removed from the offending feeds a minimum of _____ hours prior to milking.
- A 6-8
 - B 4-6
 - *C 2-4**
 - D 1-2
31. The total supply of milk is directly influenced by the _____.
- *A prices paid to milk producers**
 - B number of manufacturing plants
 - C amount of foreign exports
 - D cost of fat production
32. It requires _____ pounds of milk to produce one pound of butter.
- A 33
 - B 11
 - *C 22**
 - D 3

33. One objective of a Federal Milk Order is to _____.
- A prevent surpluses of milk in the market place
 - B assure that all dairy plants receive an adequate supply of milk
 - *C assure consumers an adequate supply of pure, wholesome milk**
 - D assure all dairy farmers an adequate income
34. Some soft serve frozen dairy products have replaced milk fat with _____.
- A peanut butter
 - *B vegetable oil**
 - C honey
 - D fruits
35. Cream cheese is different from cottage cheese in that _____.
- A cream cheese is made from cows' milk and cottage cheese is not
 - B all of these are true for both cream cheese and cottage cheese
 - C cream cheese is an acid curd and cottage cheese is not
 - *D cream cheese requires a started culture of bacteria and cottage cheese does not**
36. The California Mastitis Test (CMT) asks that you use only the _____.
- A colostrum
 - B first stream during milking
 - *C 2nd stream during milking**
 - D milk after dry-off
37. The flavors which cannot be detected by odor are _____.
- A high acid and rancid
 - B metallic/oxidized and malty
 - *C bitter and salty**
 - D feed and garlic/onion
38. The whey proteins in milk constitutes about _____ percent of the total protein found in milk.
- A 15
 - B 10
 - C 20
 - *D 18**
39. A milking machine applies a _____ to the end of the teat to remove milk.
- A increased pressure
 - B vibration
 - *C vacuum**
 - D massaging action
40. Light whipping cream has a minimum of _____ percent milk fat.
- A 40
 - B 35
 - *C 30**
 - D 18

41. Approximately _____ percent of today's youth consume the recommended amount of dairy products?
A 10
B 50
C 70
***D 30**
42. The absence of _____ in milk is not an accident, since they would catalyze oxidation, producing metallic or oxidized flavors.
A boron and tin
B zinc and brass
C lead and casein
***D iron and copper**
43. When a producer's milk tests positive for a Beta Lactam drug, the authorities do not _____.
A immediately suspend the producers Grade A milk permit
***B forego permit suspension provided the milk is not sold as Grade A milk**
C investigate to determine the cause
D enforce a penalty for the value of all the milk on the contaminated load, plus expenses
44. Cold storage of milk results in _____.
A stoppage of all bacterial growth
B killing of all microorganisms
***C slowing of bacterial growth**
D killing of all bacteria
45. Cream is a liquid milk product separated from the fluid milk that must contain a minimum of _____ percent fat.
A 4
B 10
C 14
***D 18**
46. About _____ percent of the calcium available in the food supply is provided by milk and milk products.
A 86
B 66
C 96
***D 76**
47. For the maximum intake of calcium, one should consume _____ milk.
A 1 percent
B whole
C 2 percent
***D skim**
48. Mozzarella can have up to _____ percent moisture content and a maximum fat content of 45 percent .
A 45
***B 60**
C 39
D 50

49. Federal definitions and standards of identity specify that whole milk contain not less than _____ percent milk fat and _____ percent solids-non-fat.
*A 3.25 ,8.25
B 3.00 ,8.25
C 3.50 ,8.00
D 3.50 ,8.50
50. The titratable acidity of milk that has been cooled properly usually ranges from _____ percent.
*A .13 to .17
B 1.3 to 1.7
C .26 to .30
D .013 to 0.17
51. The Grade A Pasteurized Milk Ordinance (PMO) specifies requirements for the production of Grade A raw milk for pasteurization and is recommended by the _____.
A United States Department of Agriculture
B Small Business Administration
C National Committee on Milk
*D Food and Drug Administration
52. The establishment of a federal Milk Marketing Order is generally initiated by _____.
A dairy farmers, milk handlers and consumers
B United States Department of Agriculture
*C dairy farmers, through their cooperative association
D milk handlers in the market
53. Federal Milk Marketing Orders give _____ an active voice in determining minimum milk prices through public hearings.
A milk consumers
*B milk handlers
C milk activists
D milk processors
54. Under Federal Orders, dairy farmers receive their milk checks _____.
A weekly
B bi-monthly
C daily
*D once or twice monthly
55. One mechanism used by the USDA to remove surplus dairy products from the supply is the _____ which subsidize manufacturers who sell overseas at a loss.
A Commodity Credit Program
*B Dairy Export Incentive Program
C Butter-Powder Formula
D Price Support Program
56. The Federal Milk Orders of today are based on the Agricultural Agreement Act of _____.
A 1957
B 1947
C 1927
*D 1937
-

57. A cow's stomach has four compartments. The _____ stomach compartment has the primary function of absorbing water and other substances from the digested contents?
*A omasum
B abomasum
C reticulum
D rumen
58. Although milk from the cow is processed, it is not an engineered or fabricated food and contains about _____ percent solids.
*A 13
B 87
C 76
D 13.5
59. The _____ test is used to detect if milk has been pasteurized properly.
*A phosphatase
B lipase
C coliform
D standard plate count
60. The practice that distributes milk payments among the producers within a specific Federal Milk Marketing Order is called _____.
A differential pricing
B support pricing
*C pool pricing
D classified pricing
61. Milk with an Acid Degree Value (ADV) of 1.0 or above will have a detectable _____ flavor.
A malty
*B rancid
C fruity
D acidic
62. Today, an average dairy cow produces approximately _____ quarts of milk per cow annually.
A 6,500
B 5,500
C 6,800
*D 8,800
63. Milk sold through commercial outlets is certified to be from herd's free of _____.
A Bovine Somatrophin (B.S.T.)
B Displaced Abomasums (D.A.)
C Broken Udder Suspensory Ligaments (BSL)
*D Tuberculosis (TB)
64. Wisconsin usually accounts for nearly _____ percent of the total cheese production in the U.S.
A 22
*B 26
C 16
D 20

65. Milk with low total solids will produce a(n) _____ off-flavor.
A malty
B acid
***C flat**
D salty
66. The national average milk production per cow is approximately _____ pounds per year.
A 24,400
***B 21,700**
C 17,700
D 15,200
67. Farm marketing cooperatives have been in existence since the early _____.
***A 1800's**
B 1700's
C 1980's
D 1900's
68. To identify specific bacteria in a Standard Plate Count, a Preliminary Incubation Count is performed in which the sample is incubated for _____.
***A 18 hours for 55 degrees F**
B 18 hours for 55 degrees C
C 32 hours for 48 degrees F
D 48 hours for 32 degrees C
69. The fluid milk product accounting for the largest fluid milk sales is _____ milk.
A whole
***B reduced/low-fat**
C nonfat
D flavored
70. The California Mastitis Test (CMT) should be read within _____ seconds after mixing.
A 40
***B 20**
C 10
D 30
71. The largest percentage of the United States milk supply is utilized in the production of _____.
A cream and specialty products
B evaporated, condensed and dried milk products
***C cheese**
D frozen dairy desserts
72. The _____ is the length of time after processing during which a dairy product normally remains suitable for human consumption.
***A shelf date**
B code date
C product life
D package date

73. Nonfat yogurt must have a maximum of _____ percent fat prior to the addition of bulky flavors.
*A .5
B 3.25
C 1
D 2
74. The hormone oxytocin is released by the _____ gland. This release stimulates the mammary gland.
A endocrine
*B pituitary
C sweat
D hypothalamus
75. When cows have mastitis, the protein content of the milk may be higher, but the cheese yield is lower because of a decrease in the _____.
A alysine
*B casein
C tryptophan
D whey
76. Low sodium cheddar cheese contains no more than _____ milligrams of sodium per pound of finished cheese.
A 56
B 45
*C 96
D 105
77. Cottage cheese from the grocery shelf must contain no less than _____ percent fat.
*A 4
B .5
C 1
D 2
78. A process that makes milk more easily digested by those with sensitive digestive systems is _____.
A evaporation
B ionization
*C homogenization
D pasteurization
79. The actual cost of producing dairy products that is used in the Class III and IV pricing formula is called the _____.
A milk-feed price ratio
*B make allowance
C Federal Order price
D cooperative bonus premium

80. When performing a California Mastitis Test (CMT) test milk from a normal quarter _____.
- A forms small clumps in a moderate reaction
 - B forms a gelatinous mass clinging together in a strong reaction
 - C turns a deep purple color
 - *D flows freely without change in viscosity**
81. Curd is the _____ cheese making process.
- A material found in the stomach of young calves, necessary for the
 - B liquid portion at the bottom on the container, that is hard to dispose of, after the
 - C region in the Middle East known for their
 - *D custard-like substance formed at the top of the container during the**
82. The _____ or uniform price is determined by the proportion of the total delivery used in products of each class.
- A average
 - B classified
 - C parity
 - *D blend**
83. A California Mastitis Test (CMT) test requires a sample of _____ cc's of milk.
- A .5
 - B 6
 - *C 2**
 - D 4
84. By using a _____ with plastic beads of varying density, nonfat solids in milk can be rapidly estimated.
- A lactometer
 - B humidoscope
 - C polyscope
 - *D hydrometer**
85. An advantage of making processed cheese is its _____.
- A better taste
 - B marketability
 - *C extended shelf-life**
 - D all of these
86. Federal Milk Marketing Orders are _____ programs that define the terms under which milk handlers within a specific marketing order purchase milk from dairy farmers.
- *A voluntary**
 - B elected
 - C mandatory
 - D congressionally required
87. Rules developed by the----- _____ are designed to protect the health and welfare of consumers.
- A United States Department of Agriculture (USDA)
 - *B Food and Drug Administration (FDA)**
 - C Future Farmers of America (FFA)
 - D Protein and Lactose Organization (PLO)
-

88. **Quality checks of Grade A milk is _____.**
A done by the milk processor
***B a responsibility of the health authority**
C the first consideration in pooling milk
D a part of the testing by Market Administrators
89. **A mixture of milk and cream containing minimum of 10.5 percent fat and a maximum of 18 percent fat is _____.**
A heavy cream
B light whipping cream
***C half-and-half cream**
D light cream
90. **The total dollars a dairy has in assets divided by the number of cows determines the _____.**
A debt to asset ratio
***B total investment per cow**
C owner equity
D debt per cow
91. **Onion and garlic exposure is responsible for the garlic/onion off-flavor in milk, and is more prevalent in pastures during the _____.**
A winter
B spring
***C early spring and late fall**
D fall
92. **Condensed milk on the grocery shelf may have _____ added.**
A minerals
***B sugar**
C salt
D cream
93. **The ability of lipase to attack milk fat and produce a rancid off-flavor is enhanced by _____.**
A exposing milk to sunlight
B feeding cows moldy hay
***C excessive agitation of warm raw milk**
D poorly cleaned milking equipment
94. **According to a report compiled by the Institute for Food Technologists, _____ is now America's favorite at-home snack.**
***A yogurt**
B cheese
C ice cream
D chocolate Milk

95. Federal Milk Marketing Orders provide or describe _____.
- A milk purchased by dealers
 - B milk sold by farmers
 - C sanitary standards used for Grade A milk
 - *D payment made to milk producers for milk**
96. Salmonellosis infections are most common in cows that have calved within _____.
- A 2 days
 - B 50 days
 - C 20 days
 - *D 10 days**
97. An acceptable time/temperature combination for pasteurization of milk is _____.
- A 145 degrees F for 15 seconds
 - *B 191 degrees F for 1 second**
 - C 201 degrees F for 1 second
 - D 161 degrees F for 10 seconds
98. The Federal Milk Marketing orders were revised in _____.
- A 1995
 - B 2004
 - C 2002
 - *D 2000**
99. Milk from countries with a somatic cell count above _____ cannot be legally shipped to the European Union (EU)?
- A 1,000,000
 - B 200,000
 - *C 400,000**
 - D 750,000
100. The pasteurized milk ordinance regulates _____ milk.
- *A Grade A**
 - B Grade C
 - C Grade D
 - D Grade B
101. The most effective and economical means of reducing the exposure of cows to mastitis-causing microorganisms is to _____.
- A wear rubber or plastic gloves during milking and disinfect the gloves between cows
 - B isolate animals with clinical mastitis
 - C disinfect or sterilize milking machine inflations between cows
 - *D use a bactericide for disinfecting the teats after milking**
102. The cheese that has maximum moisture of 45 percent and a minimum of 45 percent fat and is a pasta filata cheese is _____.
- A cheddar
 - B swiss
 - C mozzarella
 - *D provolone**

103. The bacteria in milk which produces lactic acid responsible for the sour taste is _____.
- A Streptococcus
 - B Psychrophilic
 - C Coliform
 - *D Streptococci**
104. The _____ legislation made farm cooperatives legal.
- A Barkley Act
 - B Sherman Act
 - C Buckley Act
 - *D Capper-Volstead Act**
105. A state that is a net importer of milk not producing enough to fulfill the needs of their population is _____.
- A South Dakota
 - *B Florida**
 - C Oregon
 - D California
106. The check off funded _____ mission is to enhance demand for U.S. milk products and ingredients by securing access and assisting suppliers to meet global market needs.
- A U.S. Department of Agriculture Grading's (USDA)
 - B Federal Milk Marketing Orders' (FMMO)
 - *C U.S. Dairy Export Council's (USDEC)**
 - D Dairy Management, Inc.'s (DMI)
107. The International Dairy Federation's (IDF) mission is to promote _____.
- A scientific, cultural & economic progress
 - B technical, scientific & industrial progress
 - C agricultural, technical & economic progress
 - *D scientific, technical & economic progress**
108. Federal Milk Marketing Orders are a mechanism for _____.
- A economical transportation of milk
 - B finding a market for every producer's milk
 - C economical utilization of milk
 - *D market stabilization**
109. The _____ is a voluntary program to help score your farm's animal welfare practices against the industry recommendations. It is operating as a partnership of the National Milk Producers Federation and Dairy Management, Inc.
- A Agriculture Animal and Plant Health Inspection Service (APHIS)
 - B National Dairy Check Off program
 - C Animal Welfare Act (AWA)
 - *D National F.A. R. M. program (Farmers Assuring Responsible Management)**

110. Milk is produced from female's mammary glands. These mammary glands are examples of a _____ gland.
- A excretory
 - *B exocrine**
 - C absorbatory
 - D adrenal
111. A form of mastitis that is hidden from sight is known as _____ mastitis.
- A clinical
 - *B sub-clinical**
 - C infectious
 - D acute
112. When a producer's three-month somatic cell count (SCC) rolling mean exceeds 400,000, a _____ request must be submitted to AMS in an effort to keep the milk eligible for export to the EU.
- A premium denial
 - B degradation
 - *C derogation**
 - D re-inspection
113. Poor quality forage will cause a significant decrease in _____.
- A casein percentage
 - B bacteria counts
 - *C fat percentage**
 - D somatic count
114. The leading U.S. state in butter production is _____.
- A Wisconsin
 - B New York
 - C Minnesota
 - *D California**
115. Vitamin _____ was first discovered in milk fat and is important for maintaining eyesight .
- A C
 - B B
 - C D
 - *D A**
116. The four primary taste sensations are _____.
- *A bitter, salt, sour, sweet**
 - B burnt, bitter, salt, sour
 - C metallic, salt, sour, sweet
 - D bitter, metallic, sour, sweet
117. The top five states in the production of cheese accounted for almost _____ percent of the total U.S. cheese production.
- A 60
 - B 80
 - *C 70**
 - D 50

118. The _____ concentration in the bulk milk tank helps the producers monitor the efficacy of their feeding programs.
- *A milk urea nitrogen (MUN)
 - B antibiotic
 - C somatic cell
 - D bacteria
119. The per capita consumption of reduced and low-fat milk averages _____ pounds/year.
- A 32
 - *B 85
 - C 45
 - D 50
120. To be labeled “made with organic ingredients” a dairy product must contain a minimum of _____ percent organic ingredients.
- A 100
 - B 90
 - *C 70
 - D 80
121. In _____ the Capper-Volstead Act gave cooperatives the right and power to organize producers of a farm commodity.
- A 1959
 - B 1729
 - *C 1929
 - D 1829
122. Milk with extra water added to it can be detected by checking the _____ of the sample.
- A titratable acidity
 - B acid degree value
 - *C freezing point
 - D sediment content
123. As produced at the farm, milk from Holstein cows is expected to contain approximately _____ percent milkfat and _____ percent nonfat milk solids.
- A 2.7 , 8.7
 - B 8.7, 3.7
 - C 8.7 , 2.7
 - *D 3.7 , 8.7
124. The state which is usually the leader in milk production per cow per year is _____.
- A Wisconsin
 - B Idaho
 - C California
 - *D New Mexico
125. The fat in one serving of whole milk (8 ounces) provides _____ calories.
- *A 90
 - B 95
 - C 100
 - D 85
-

126. The main objection to dirt and milk stone on milker parts is it causes _____.
- A poor appearance
 - *B increased bacterial counts**
 - C poor milker function
 - D vacuum fluctuations
127. A Milk Order, including pricing and other provisions, becomes effective only after approval of the _____.
- A milk processors
 - *B dairy farmers**
 - C Secretary of Agriculture
 - D consumers
128. Butter will begin to lose some of its natural flavor after _____ at refrigerated temperatures.
- A 1 year
 - *B 6 months**
 - C 2 years
 - D 2 months
129. The two most important etiologic agents of mastitis are _____.
- A Pseudomonas aeruginosa and coliform bacteria
 - B Klebsiella and actinomycetes
 - *C Streptococcus agalactiae and Staphylococcus aureus**
 - D Streptococcus uberis and Streptococcus dysgalactiae
130. While milk fat tests are monitored by Federal Milk Market administrators, they do not check _____.
- A for Grade A milk shipped into a market from non-qualified producers
 - B how the milk is used
 - C the amount of milk sold
 - *D the bacteria counts of milk**
131. Dry milk can be stored for long periods of time provided it is _____.
- A in a cabinet
 - *B in a sealed atmosphere of nitrogen or carbon dioxide**
 - C in refrigerated vaults
 - D at temperatures above 150 degrees
132. According to the Food & Nutrition Board of the National Academy of Sciences, all people need at least _____ milligrams of calcium per day.
- A 100,000
 - B 10,000
 - *C 1,000**
 - D 100
133. USDA test milk in their laboratories for Federal Milk Market Orders to _____.
- A provide data for the US Statistical Reporting Service
 - B make sure food and drug laws are followed
 - C assure safety of the supply
 - *D provide accurate accounting of milk solids sold**

134. Whole milk contains _____ percent protein.
A 4.0-4.99
B 1.0-1.99
***C 3.0-3.99**
D 2.0-2.99
135. The minimum fat content of cheddar cheese is _____ percent.
***A 50**
B 33
C 20
D 40
136. HACCP is a voluntary management tool that milk plants participate in for the control of identified hazards and is based on _____ operating principles.
***A 7**
B 3
C 5
D 10
137. The best control of contagious mastitis is _____.
***A germicidal teat dip**
B antibiotic teat dip
C iodine teat dip
D barrier teat dip
138. Operating costs for Federal Milk Orders are paid by the _____.
***A milk handlers**
B Federal Government
C milk producers
D State Department of Agriculture
139. The milking procedure recommended to flush potential mastitis-causing bacteria from the teat canal, allow you to observe early signs of clinical mastitis and help promote milk letdown is _____.
***A forestripping**
B predipping
C towel drying
D postdipping
140. Milk is the only source of _____ in nature.
***A lactose**
B calcium
C fatty acids
D phosphorous
141. The cheese price series is based on United States cheese plants that make 80-85 percent of the bulk cheddar. This series is called _____ survey.
***A NASS Cheddar Cheese Price**
B U.S. Cheddar Cheese Price
C NASS Swiss Cheese Price
D NASS Cheese Price

142. To make Mozzarella cheese the pasteurized milk is curded at _____ ?F.
*A 88
B 145
C 190
D 45
143. USDA projects that the number of dairy cows will _____ by 2018 while milk production increases to 227 billion pounds.
A remain constant
B gradually increase
*C gradually decrease
D significantly increase
144. A CMT test result that indicates a somatic cell count of 400,000 to 1,500,000 will produce a _____.
A slight precipitate which tends to disappear
*B distinct precipitate, but no gel
C viscous gel which adheres to paddle.
D mixture which thickens with slight gelation
145. Mastitis in milk _____.
A decreases calcium content
*B has a direct effect on cheese yield
C increases protein content
D may cause increased rancidity
146. Federal Milk Orders only regulate _____.
A farmers
B retail store owners
C truckers
*D handlers
147. The rules adopted by states to govern the production, processing, packaging and storage of Grade A milk are based on the _____.
A Pure Milk Act of 1937
B Code of Federal Regulations
*C Pasteurized Milk Ordinance and Code
D USDA Rules and Regulations
148. Approximately 18 percent of the total annual milk supply in the U.S. is to make _____.
A yogurt
B ice cream
*C butter
D cottage cheese
149. One gallon of milk weighs approximately _____ pounds.
A 7.8
*B 8.6
C 5.5
D 10.1

150. Dry cream is produced by removing the water from pasteurized milk and/or cream. Dry cream is required to contain a minimum of _____ percent fat.
- A 18
 - *B 40**
 - C 75
 - D 30
151. Milk marketed as low-fat milk has no more than _____ percent milk fat.
- A 3.25
 - *B 1**
 - C 2
 - D 2.5
152. The microbiological standard for Grade A raw milk from a single producer is _____ bacteria per millimeter of milk prior to co-mingling with milk from other producers.
- A 150,000
 - B 200,000
 - *C 100,000**
 - D 50,000
153. A good nutritional strategy to maintain milk production in hot weather is to _____ in the ration.
- *A add more fat**
 - B increase protein concentration
 - C add more water
 - D feed more grain
154. The bulk milk hauler plays a critical role in milk handling but _____ is not one of their duties.
- A examining the appearance of milk
 - *B making sure equipment has been cleaned correctly**
 - C checking milk temperature
 - D collecting a representative sample to be used for testing
155. Federal milk marketing orders regulate the sale of _____ milk.
- *A Grade A**
 - B Grades A, B and C
 - C Grade C
 - D Grade B
156. The major cause of a salty flavor in milk is _____.
- A bacterial action
 - B the large intake of salt by the cow
 - *C a mastitis infection**
 - D excessive sunlight exposure
157. If the dairy ingredients have a fat content of 10 percent or more, the specified pasteurization temperature shall be increased by ____? F.
- *A 5**
 - B 1
 - C 2
 - D 3
-

158. Specific gravity of milk at 60°F is _____ m/s².
*A 1.032
B 1.052
C 1.022
D 1.042
159. The exposure of hot milk or milk products to a reduced pressure to remove volatile substances, especially those that enter the milk from feed, is called _____.
*A vacuumization
B vaporization
C infusion heater
D volume reduction
160. The decision of a milk hauler to accept or reject milk at the farm _____.
A is made the day before pickup is scheduled
B all of these
*C depends on a knowledge of milk quality and ability to smell off odors
D must always be confirmed by acidity test
161. Heavy cream (whipping cream) contains a minimum milk fat of _____ percent.
*A 36
B 18
C 10
D 30
162. HACCP stands for _____.
*A Hazard Analysis and Critical Control Points
B Help Animals in Confined Conditions and Preserves
C High Altitude Computer Control Protocol
D High Aptitude Critical Consideration and Punctuality
163. A _____ cup is a cup with fine wire mesh on top used to detect the presence of abnormal milk.
A striated
B streak
C mesh
*D strip
164. The United States Government purchases surplus _____ from the commercial market under the dairy price support program.
A fluid milk products, butter, cheese
B butter, evaporated milk, ice cream
C ice milk, yogurt, cottage cheese
*D cheese, nonfat dry milk, butter
165. Dairy cows need a _____ day dry period for rejuvenation of secretory tissue and restoration of body condition.
A 90
*B 60
C 120
D 30

166. Protein and amino acids go hand in hand since _____.
- A proteins link to amino acids in bone formation
 - B proteins are the building blocks of amino acids
 - *C amino acids are the building blocks of protein**
 - D amino acids and proteins need to be found in a 2:1 ratio in all diets
167. Dry cream is produced by removing the water from pasteurized milk and/or cream. Dry cream will have a maximum milk fat of _____ percent for economic reasons.
- A 40
 - *B 75**
 - C 30
 - D 18
168. By FDA definition, an imitation product does not have to _____ the real product is represents.
- *A have the same nutritional value as**
 - B taste like
 - C looks like
 - D imitation products are not regulated by the FDA
169. A rancid flavor in milk is often caused by _____.
- *A extreme agitation of raw milk**
 - B feeding haylage
 - C storing milk in the sunlight
 - D feeding high moisture corn
170. A consumer found an off-flavor in milk packaged in transparent plastic jugs exposed to high intensity fluorescent light. The off-flavor probably was _____.
- A malty
 - *B oxidized**
 - C rancid
 - D high acid
171. A cheese which did not originate in Italy is _____.
- *A muenster**
 - B parmesan
 - C provolone
 - D mozzarella
172. The Standard Plate Count (SPC) has a prescribed incubation time of _____ hours at _____ ?C.
- A 24 at 32
 - *B 48 at 32**
 - C 48 at 0
 - D 12 at 45
173. Mozzarella makes up nearly _____ percent of the total cheese production in the U.S.
- A 28
 - B 43
 - *C 34**
 - D 22

174. The first milk produced after parturition is called _____.
- A coliseum
 - B serial
 - C celestial
 - *D colostrum**
175. The state not in the top for production of cheese is _____.
- *A New York**
 - B Minnesota
 - C Wisconsin
 - D Idaho
176. One 8 oz. serving of milk has about _____ milligrams of calcium.
- A 150
 - B 200
 - C 90
 - *D 250**
177. Milk used to make ice cream would be priced in a Federal Order class _____.
- A IV
 - *B II**
 - C I
 - D III
178. An example of an unripen variety of cheese is _____.
- A parmesan
 - B bleu
 - *C cream**
 - D brie
179. Milk is _____ to prevent milk fat from separating itself from the fluid portion of the milk.
- A pasteurized
 - *B homogenized**
 - C sterilized
 - D thermalized
180. Dairy farmers receive _____ percent of the retail sale price of a half-gallon of milk?
- A 6
 - B 46
 - *C 26**
 - D 16
181. Milk from cows with high somatic cell counts may have decreased levels of _____.
- A whey protein
 - B trace minerals
 - *C casein**
 - D butterfat

182. Milk that has been ultra-pasteurized is heated to _____ °F or above for _____ seconds.
- *A 280 , 2
 - B 212 , 3
 - C 260 , 2
 - D 191 , 2
183. Ice cream must weigh a minimum of _____ pounds to the gallon.
- *A 4.5
 - B 3.5
 - C 5.25
 - D 5.0
184. Under Federal Milk Marketing Orders Class III milk is used to make _____.
- A ice cream
 - B butter and dry milks
 - *C ripened cheeses
 - D cottage cheese
185. Dry milk must have less than _____ percent moisture by weight.
- A 10
 - *B 5
 - C 15
 - D 25
186. There are _____ Federal Milk Marketing Order in the United States.
- A more than 30
 - *B ten
 - C 50- one per state
 - D 48- number of states within the continental limits
187. When it comes to fertilizing fields, “secondary nutrients” are _____.
- A nitrogen, phosphorus, potassium
 - B calcium, nitrogen, and water
 - *C calcium, sulfur, and magnesium
 - D potassium, phosphorus, and zinc
188. A Federal Milk Marketing Order is not authorized unless two-thirds of the affected _____ milk from/to the proposed marketing area approves its implementation.
- A dairy cooperatives supplying
 - B cheese processors using
 - C handlers processing
 - *D producers supplying
189. Body condition scoring is one way to measure cow health. The ideal score for a milking cow is _____.
- *A 3
 - B 5
 - C 1
 - D 4

190. Milk becomes the property of the buyer once _____.
- A the transport truck leaves the farm
 - B the transport truck reaches the plant
 - *C it is loaded into the transport truck on the farm**
 - D it is unloaded into the processor's bulk tanks
191. The worlds leading dairy exporter is _____.
- A United States
 - B European Union (EU)
 - *C New Zealand**
 - D China
192. Lactose is the principal _____ in milk.
- A fat
 - *B carbohydrate**
 - C protein
 - D mineral
193. Cheddar cheeses sold in the United States, made from unpasteurized milk, must be ripened at least _____ days.
- A 120
 - B 150
 - C 30
 - *D 60**
194. Milk that is used to make butter is class _____ milk under Federal Orders?
- A III
 - B II
 - *C IV**
 - D I
195. The average per capita consumption per year of _____ is about 32 pounds.
- A butter
 - B fluid milk products
 - *C cheese**
 - D ice cream
196. For each one percent of water added to milk, the freezing point will increase by _____.
- A 0.060 degrees C
 - *B 0.006 degrees C**
 - C 0.002 degrees C
 - D 0.004 degrees C
197. Federal Milk Markets Orders do not _____.
- *A impose sanitary restrictions on production**
 - B become legal instruments
 - C produce a uniform system of classified pricing
 - D guarantee producers a market

198. Fluid milk accounts for _____ percent of the U.S. milk supply.
A 20
B 22
***C 15**
D 25
199. The somatic cell count standard for Grade A raw milk is _____ or less per milliliter of milk.
A 1,500,000
B 500,000
C 1,000,000
***D 750,000**
200. Mastitis has severe economic consequences. The high somatic cell count causes a decrease in cheese yield and the bacteria causes a _____ in lactose (milk sugar).
A denaturation
B gram-negative infection
***C decrease**
D increase
201. The Standard of Identity for ice cream requires that it contain a minimum of _____ percent milk fat.
A 12
B 14
***C 10**
D 16
202. Cottage cheese is a soft, unripened cheese with approximately _____ percent moisture content.
A 40
B 20
***C 80**
D 60
203. Milk contains all the known vitamins and is an especially good source of _____.
***A riboflavin**
B cyanocobalmin
C thiamine
D ascorbic acid
204. Potassium can significantly reduce the absorption of _____ found in dairy rations.
A phosphorus
B calcium
***C magnesium**
D copper
205. Cooperatives Working Together (CWT) is the _____ program that aims to strengthen and stabilize milk prices by balancing supply and demand.
A federal-funded
***B farmer-funded**
C state-funded
D none of these

206. HACCP inspects each dairy farm a minimum of _____.
- *A every 6 months
 - B once a year
 - C once each month
 - D every 2 years
207. Some dairy food products have a “REAL” seal on the package. This seal may not be placed on a package unless the product is _____.
- *A produced from NON-organic sources
 - B produced from U.S. milk
 - C meeting federal standards
 - D imitation or substitute foods
208. Chemical sanitizers containing _____ are most widely used for sanitizing milking equipment.
- A iodine
 - B saline
 - C bromine
 - *D chlorine
209. To properly sanitize milk lines and equipment, water must be circulated in place (CIP) at a minimum temperature of _____ for least 5 minutes.
- A 65 degrees C (160 degrees F)
 - B 55 degrees C (140 degrees F)
 - C 87 degrees C (190 degrees F)
 - *D 77 degrees C (170 degrees F)
210. Average milk prices are the lowest in the _____.
- *A spring
 - B winter
 - C fall
 - D summer
211. About _____ percent of all the milk produced by U.S. dairy farmers is used to produce ice cream.
- A 35
 - B 21
 - C 45
 - *D 9
212. It takes approximately _____ pounds of skim milk to make a pound of dry curd cottage cheese.
- A 7.8
 - *B 7.3
 - C 8.6
 - D 4.3
213. Most farm bulk milk tanks are designed for every-other-day (EOD) pickup and must cool 25 percent of the volume of the tank to _____ °F within two hours after milking.
- A 60
 - B 70
 - *C 45
 - D 25

214. A fluid milk product that contains at least 8.25 percent nonfat milk solids and no more than 0.5 gram of fat in a single 8 ounce serving is _____.
- A whole Milk
 - B reduced fat milk
 - *C nonfat milk**
 - D low-fat milk
215. In Federal Order markets, milk sold for consumption in fluid form is _____ milk.
- *A Class I**
 - B Class III
 - C Class IV
 - D Class II
216. Adolescents have a recommendation of _____ milligrams of calcium per day.
- A 1,200
 - B 1,500
 - *C 1,300**
 - D 1,000
217. The major difference between evaporated and condensed milk is _____.
- *A condensed milk has sugar added to it**
 - B condensed milk has a lower fat content than evaporated milk
 - C evaporated milk has less water than condensed milk
 - D condensed milk comes in smaller size containers than evaporated milk
218. One test for antibiotics, a common adulterant of milk, is based upon the principle that the growth of bacteria is _____ by them.
- *A inhibited**
 - B stimulated
 - C enhanced
 - D magnified
219. The “set aside” of \$0.15 per hundred pounds of milk from a milk producer’s check is used for programs that support _____.
- A promotion and testing
 - B research and testing
 - *C promotion and research**
 - D teaching and research
220. New food plate guidelines recommended servings of dairy products per day?
- A 4
 - B 2
 - C 5
 - *D 3**
221. The _____ off-flavor is seldom found except in pasteurized milk that has been stored too long.
- A high acid
 - B foreign
 - C feed
 - *D unclean**

222. Determining _____ is not an objective of milk evaluation.
A the presence of undesirable characteristics
***B one brand of milk from another**
C whether one sample differs from another
D the presence of desirable characteristics
223. A cow needs _____ pounds of water for every pound of dry matter consumed.
A 25 to 30
B 10 to 15
C 1 to 2
***D 4 to 5**
224. A cryoscopy is an important tool used to test for _____ in milk.
A butterfat
***B added water**
C antibiotics
D protein
225. The traditional method of pricing milk uses a milk fat differential of .1 percent from a base of _____ percent milk fat.
A 3.25
B 3.0
C 3.75
***D 3.50**
226. Off-flavors in milk such as acid, high acid, or sour milk are caused by _____.
A weeds
B chemical adulterants
***C microorganisms**
D sediment residues
227. If vitamin A is added to milk, it must be at a level of no less than _____ international units (I.U.) per quart.
A 1,500
***B 2,000**
C 1,000
D 400
228. Summer milk has been estimated to contain 1.6 times as much vitamin _____ as winter milk.
A B
B C
***C A**
D D
229. To defray the cost of Federal Orders, handlers are assessed _____ cents per hundredweight of milk received.
A 7-10
B 15
***C 2-5**
D 1-3

230. Quality of Grade A milk is _____.
- A a part of the testing by Market Administrators
 - B only checked when there is excess milk
 - *C not controlled by Federal Orders**
 - D the first consideration in pooling milk
231. The _____ off-flavor of milk is not caused by bacteria.
- A malty
 - *B salty**
 - C yeasty
 - D bitter
232. The standard plate count (SPC) is an estimate of the total number of _____ microorganisms.
- A anaerobic
 - *B aerobic**
 - C sub clinical
 - D probiotic
233. An example of value-added agriculture is _____.
- A using a custom heifer raiser
 - B purchasing milk from a local producer
 - C contracting your alfalfa early
 - *D a farm that markets a "farm branded" cheese**
234. The standard plate count for different producers' milk that is comingled together can be as high as _____?
- A 400,000/ml.
 - B 200,000/ml.
 - *C 300,000/ml.**
 - D 750,000/ml.
235. The marketing tool used in the futures market by someone who owns a commodity such as milk and intends to sell it sometime in the future is _____.
- A pooling contract
 - B basis contract
 - *C short hedge contract**
 - D speculating contract
236. It requires _____ pounds of milk to produce one gallon of gourmet ice cream.
- A 16
 - B 24
 - *C 12**
 - D 8
237. Monterey Jack cheese has a maximum moisture content of _____ percent.
- *A 44**
 - B 36
 - C 24
 - D 60

238. Aflatoxins sometimes found in dairy feeds are produced by _____.
- *A mold
 - B protozoa
 - C bacteria
 - D yeasts
239. The Babcock test is a rapid, simple and accurate test for _____ in milk.
- *A fat content
 - B water
 - C nonfat milk solids content
 - D titratable acidity
240. Federal Milk Order hearings can be lengthy because any _____ can testify and anyone may cross-examine the witness.
- A federal lawyer
 - B federal employee
 - C cooperative manger
 - *D interested party
241. The current U.S. per capita consumption of milk is approximately _____ gallons per year.
- *A 20
 - B 15
 - C 25
 - D 28
242. Approximately _____ percent of the 2015 U.S. milk supply was used to make cheese.
- A 10
 - B 40
 - *C 50
 - D 60
243. Bacteria that survive heat treatment are said to be _____.
- A psychophilic
 - B psychotropic
 - C coliform
 - *D thermoduric
244. The actual milk check received by dairy farmers is called the _____.
- *A mailbox price
 - B milk-feed ratio price
 - C Federal Order price
 - D cooperative bonus premium price
245. The milk fat differential used in paying for raw milk is _____.
- A a value established to penalize milk producers who have too much fat in their milk
 - B a value set to penalize milk producers who have too little fat in their milk
 - *C the price to be added or subtracted per .1 percent of milk fat above or below a set percentage
 - D the price to be added or subtracted per .5 percent of milk fat above or below a set percentage

246. Cultured sour cream is required by federal standards to have a minimum of _____ percent fat.
A 10
B 3.25
C 5
***D 18**
247. Demand for dairy products is typically the lowest in the _____.
A fall
B spring
C winter
***D summer**
248. U.S. milk production in 2013, increased to over _____ pounds of milk.
A 100 billion
***B 200 billion**
C 1 billion
D 10 billion
249. The _____ is not an antibiotic screening test for Beta Lactam drugs in raw milk.
A snap test
B delvo test
***C assay test**
D charm test
250. The healthiest range for somatic cell counts is _____.
A 400,000-1,200,000
***B 0-200,000**
C 5,000,000+
D 200,000-400,000
251. Milk is a good source of all water-soluble vitamins except _____.
A riboflavin
B thiamine
***C ascorbic acid**
D cyanocobalmin
252. Most antibiotic screening tests to be approved for use, must detect _____ primary Beta Lactam drugs.
A 6 of 8
***B 4 of 6**
C 3 of 4
D 8 of 12
253. The maximum acceptable coliform bacteria count for Grade "A" pasteurized milk is usually considered to be _____ /milliliter.
A 50
***B 10**
C 100
D 15

254. It takes approximately _____ pounds of whole milk to make one pound of whole milk cheddar cheese.
- A 5
 - B 13
 - C 22
 - *D 10**
255. The _____ practice destroys 90 percent of BST found in milk.
- *A pasteurization**
 - B reverse osmosis
 - C hormonization
 - D homogenization
256. The ideal cleaning material for removing milk stone from milking equipment surfaces is _____.
- A chelate solution
 - B surfactant
 - C phosphate solution
 - *D acidic detergent**
257. Farm water supplies must be protected from surface contamination. Water is usually tested for _____ as an indicator of possible sewage contamination.
- A proteolytic bacteria
 - B psychotropic bacteria
 - C lipolytic bacteria
 - *D coliform bacteria**
258. Some streptococci that produce lactic acid also produce certain aldehydes, which impart a _____ flavor to milk.
- A metallic
 - B salty
 - C bitter
 - *D malty**
259. The country that is usually the largest purchaser of U.S. dairy products is _____.
- A Japan
 - B China
 - C Canada
 - *D Mexico**
260. One state that does not participate in the Federal Milk Marketing Order program but is considering a proposal to create a Federal Milk Order is _____.
- A New York
 - *B California**
 - C Pennsylvania
 - D Minnesota
261. Yogurt is manufactured from fresh, whole, low-fat or skim milk that is heated before fermentation. Federal standards require yogurt to have a minimum of _____ percent fat.
- A .5
 - B 1
 - C 2
 - *D 3.25**

262. A dairy farm transitioning to certified organic production will require _____ years to complete the process.
- A 1
 - B 5
 - C 7
 - *D 3**
263. The natural lipase enzyme contained in all raw milk is kept away from milk fat globules, thus preventing development of rancidity because the _____.
- A enzyme has to be activated by the heat of pasteurization
 - *B fat globule is surrounded by a protective membrane**
 - C fat globules are too small to attract the enzyme until they are homogenized
 - D major protein, casein, ties up the lipase
264. California is the leading state in production of ice cream, followed by _____.
- A Minnesota
 - B Texas
 - C Colorado
 - *D Indiana**
265. The off-flavor most likely to be found in milk that has not been cooled properly is _____.
- A rancid
 - B oxidized
 - C bitter
 - *D sour**
266. In regards to commodities, hedging is the _____.
- A buying of goods on the belief their value will increase
 - *B the act of protecting yourself against negative price changes**
 - C the act of buying and selling stocks
 - D the act of buying and selling commodities
267. The constant freezing point of milk is generally considered to be a negative _____.
- *A 0.517 degrees C**
 - B 0.508 degrees C
 - C 0.500 degrees C
 - D 0.502 degrees C
268. A primary cause of milkstone on equipment is due to _____.
- A all of these
 - *B failure to use adequate detergent in dairies that have hard water**
 - C the use of acid cleaners in dairies having hard water
 - D the use of soft water for cleaning and rinsing
269. Evaporated milk is preheated to stabilize the protein, followed by the removal of _____ percent of the water.
- *A 60**
 - B 30
 - C 90
 - D 100

270. Suspension of a milk producer's Grade A permit can result after _____ previous bacterial counts exceed the standard.
- *A 3 of 5
 - B 4 of 6
 - C 2 of 4
 - D 5 of 7
271. The increased use of bulk cooling and storage equipment has made _____ bacteria the primary organisms in raw milk.
- *A psychrophilic
 - B coliform
 - C staphylococcus
 - D streptococcus
272. The secretory tissue within the mammary gland is a grapelike structure called:
- A annular ring
 - *B alveoli
 - C clitoris
 - D glanus cistern
273. Most dairy cows are milked two or three times per day. On average, a cow will produce _____ pounds of milk each day.
- A 8.6 -17.4
 - *B 51.6 – 64.5
 - C 126 -137.6
 - D 172.2 - 180.6
274. A pooling method where, handlers with higher than average utilization pay into the pool and handlers with lower than average utilization receive payments from the pool, is called _____.
- *A producer settlement fund
 - B Individual handlers pools
 - C base excess pricing
 - D louisville take out/pay back
275. By regulation, milk from cows treated with antibiotics usually must be withheld for _____ hours.
- *A 48 – 72
 - B 30-60
 - C 72 – 96
 - D 48 – 108
276. Milk protein allergies are a form of milk intolerance. These generally occur only in infants and are usually outgrown by _____ months of age.
- *A 24
 - B 18
 - C 12
 - D 6

277. Based on ice cream consumption figures, the second most popular flavor is _____.
- A strawberry
 - B vanilla
 - C cookies n' cream
 - *D chocolate**
278. According to the USDA Dairy Products summary, Wisconsin has the most manufacturing plants with 210 while _____ has no manufacturing plants.
- *A Wyoming**
 - B Arkansas
 - C Mississippi
 - D Tennessee
279. Amino acids are commonly found in milk proteins, including the _____ essential amino acids.
- *A 19**
 - B 7
 - C 12
 - D 14
280. An imitation/substitute product by FDA definition meets all of the following statements except:
- A Looks like the real product it represents
 - B Has the same nutritional value as the real product in replaces
 - C Taste like the real product it represents
 - *D Imitation/substitute products are not regulated by the FDA**
281. The Agricultural Act of 2014 (farm bill) provides a risk management tool for U.S. dairy producers. This tool recognizes large swings in feed costs and milk prices and is referred to _____.
- A Milk Income Loss Contract
 - B Price Support Program
 - *C Milk Income-Over-Feed Cost**
 - D Dairy Export Incentive Program
282. The largest increase in per capita consumption for any dairy product was in _____.
- A cheese
 - B ice cream
 - *C yogurt**
 - D low-fat milk
283. A magnet is typically used in the _____ stomach to trap metal objects that cause hardware disease.
- A omasum
 - B rumen
 - *C reticulum**
 - D abomasum
284. Cow's milk contains _____ percent lactose.
- A 3
 - *B 5**
 - C 6
 - D 4

285. The highest price for milk is paid in the _____ region of the United States
- A northeast
 - B southwest
 - *C southeast**
 - D northwest
286. For the best utilization of nutrients, reduced risk of runoff and reduced odors, the _____ manure management practice is favored.
- *A injection**
 - B broadcast
 - C surface application
 - D flood application
287. It takes approximately _____ pounds of skim milk to make one pound of non-fat dry milk.
- A 12
 - B 10
 - *C 11**
 - D 20
288. Over half of the top 50 U.S. dairy cooperatives belong to a federation that is dairy farmers' chief lobbying voice in the nation's capital. The name of this federation is the _____.
- A International Dairy Foods Association
 - B National Milk Producers Federation
 - *C Dairy Farmers of America Federation**
 - D International Dairy Federation
289. There are four classes of milk under Federal Orders which provide for _____.
- A Payment for the relative safety of each class
 - B payment for milk according to its cost of production
 - *C payment for milk according to its end use**
 - D payment for milk according to its quality
290. Fluid milk use per person has reached its lowest level since tracking began in 1909. Currently _____ pounds of fluid milk are currently used per person per year.
- *A 201**
 - B 86
 - C 312
 - D 515
291. The largest exported U.S. dairy product by total volume is _____.
- *A dry whey**
 - B non-fat dry milk
 - C condensed milk
 - D cheese and curd
292. The enzyme _____ is almost completely inactivated during pasteurization.
- A acid glycerol
 - B FFA (Free Fatty Acid)
 - *C alkaline phosphatase**
 - D lactose

293. Cows with _____ have a higher incidence of mastitis because physical injury is more likely.
*A **pendulous udders**
B lower foot angles
C horns
D sickle hocks
294. The country which averages the second largest production per cow behind the U.S. is _____.
A Argentina
*B **Japan**
C Australia
D Canada
295. Milk provides _____ and _____ in approximately the same ratio as found in bone.
A calcium and magnesium
*B **calcium and phosphorus**
C calcium and iron
D phosphorus and magnesium
296. The maximum moisture content of cheddar cheese is _____ percent.
A 30
*B **39**
C 12
D 23
297. Data from the International Dairy Federation shows _____ to have the highest capita consumption of butter and milk.
A United States
B Brazil
C New Zealand
*D **Australia**
298. According to HACCP, a receiving station is where _____.
*A **raw milk is received, handled, stored, etc**
B cows enter the parlor to be milked
C trucks receive milk
D supplies are received
299. A high acid (sour) flavor in milk is caused by _____.
A exposure of cows to acid rain
B cows drinking hard water
*C **growth of bacteria in the milk**
D cows absorbing acid from corn silage
300. Since 1984, when President Ronald Reagan proclaimed a National Ice Cream Month, it has been celebrated annually in _____.
A June
*B **July**
C September
D August