

2012-2015 TEXAS FFA MILK QUALITY AND PRODUCTS CDE TEST QUESTIONS

- 1) The milk fat differential used in paying for raw milk is:
 - a. **The price to be added or subtracted per 1/10 % of milk fat above or below a set percentage**
 - b. A value established to penalize milk producers who have too much fat in their milk
 - c. A value set to penalize milk producers who have too little fat in their milk
 - d. The price to be added or subtracted per 50 percent of milk fat above or below a set percentage

- 2) The form of mastitis that is hidden from sight is known as _____.
 - a. Infectious
 - b. Clinical
 - c. Acute
 - d. **Sub-Clinical**

- 3) Which of the following will best control contagious mastitis?
 - a. Pre-milking teat dip
 - b. Barrier type teat dip
 - c. Antibiotic teat dip
 - d. **Germicidal teat dip**

- 4) The Standard Plate Count (SPC) has a prescribed incubation time of _____ hours at _____ °C.
 - a. 24 hours at 32°C
 - b. 48 hours at 45°C
 - c. **48 hours at 32°C**
 - d. 12 hours at 45°C

- 5) One type of test for antibiotics, common adulterants of milk, is based upon the principle that the growth of bacteria is _____ by them.
 - a. Stimulated
 - b. Enhanced
 - c. Magnified
 - d. **Inhibited**

- 6) The _____ test is used to detect if milk has been pasteurized properly.
 - a. Lipase
 - b. Coliform
 - c. Standard Plate Count
 - d. **Phosphatase**

- 7) Milk provides _____ and _____ in approximately the same ratio as found in bone.
- Calcium and Magnesium
 - Calcium and Phosphorus**
 - Calcium and Iron
 - Phosphorus and Magnesium
- 8) Which of the following is not a cause of coliform mastitis?
- Cracked or split inflations
 - Milking too soon after calving**
 - Using excessive water in washing udders
 - Slightly damp, warm bedding
- 9) About _____ percent of the calcium available in the food supply is provided by milk and milk products.
- 66%
 - 76%**
 - 86%
 - 96%
- 10) Which of the following directly influence(s) the total supply of milk?
- Prices paid milk producers**
 - Manufacturing plants
 - Costs of fat production
 - Foreign exports
- 11) The pasteurized Milk Ordinance regulates what?
- Grade A milk**
 - Manufacturing grade milk
 - Grade B milk
 - Grade C milk
- 12) Dairy farmers can buy and sell dairy futures on what exchange?
- New York Stock Exchange
 - National Dairy Exchange
 - Coffee, Sugar, Coca Exchange
 - Chicago Mercantile Exchange**
- 13) According to the Food & Nutrition Board of the National Academy of Sciences, all people need at least _____ milligrams of calcium per day.
- 100
 - 1000**
 - 10,000
 - 100,000

- 14) The cheese price series is based on 63 U.S. cheese plants that make 80-85 percent of the bulk Cheddar. What is the price series called?
- NASS Cheese Price Survey
 - NASS Cheddar Cheese Price Survey**
 - NASS Swiss Cheese Price Survey
 - U.S. Cheddar Cheese Price Survey
- 15) What marketing tool would be used in the futures market by someone who owns a commodity such as milk and intends to sell it sometime in the future?
- Basis contract
 - Pooling contract
 - Short Hedge**
 - Speculating buyer
- 16) Farm water supplies must be protected from surface contamination. Water is usually tested for _____ as an indicator of possible sewage contamination.
- Proteolytic bacteria
 - Lipolytic bacteria
 - Coliform bacteria**
 - Psychotropic bacteria
- 17) Specific gravity of milk at 60°F is _____.
- 1.022
 - 1.032**
 - 1.033
 - 1.042
- 18) The International Dairy Federations (IDF) mission is to promote _____.
- Scientific, cultural & economic progress
 - Agricultural, technical & economic progress
 - Technical, scientific & industrial progress
 - Scientific, technical & economic progress**
- 19) USDA reports net prices received by dairy farmers for milk, usually the prices are published on a map to show regional differences. The prices are referred to as _____.
- Blend prices
 - Regional prices
 - Mailbox prices**
 - BFP prices

- 20) The “set aside” of \$0.15 per hundred pounds of milk from a milk producer’s check is used in programs that support _____.
- Promotions & research**
 - Research & testing
 - Teaching & promotion
 - Promotion & teaching
- 21) What is the most popular size container used for fluid milk?
- Gallon**
 - Half Gallon
 - Quart
 - Five quart bulk
- 22) Onion and garlic are responsible for the garlic/onion off-flavor in milk, and are more prevalent in pasture during _____.
- Fall
 - Spring
 - Early and late summer
 - Early spring and late fall**
- 23) Chemical sanitizers containing _____ are most widely used for sanitizing milking equipment.
- Bromine
 - Saline
 - Chlorine**
 - Iodine
- 24) Milk found in cows with a high somatic cell count would result in a decrease in _____.
- Butterfat
 - Whey protein
 - Casein**
 - Trace minerals
- 25) Milk is a good supplier of minerals except for _____.
- Magnesium-Iron-Manganese-Copper**
 - Riboflavin-Magnesium-Lactose-Manganese
 - Phosphorus-Copper-Zinc-Calcium
 - Potassium-Boron-Iron-Calcium
- 26) Adulterants of milk that are detrimental to human health are _____.
- Proteins
 - Pesticides**
 - Water
 - Minerals

- 27) Water added to milk is detected by checking the _____.
a. Acid degree value
b. Sediment content
c. Titratable acidity
d. Freezing point
- 28) Milk with low total solids will produce what off-flavor?
a. Flat
b. Malty
c. Salty
d. Acid
- 29) A cryoscopy is an important tool that test for _____ in milk.
a. Butterfat
b. Antibiotics
c. Pesticides
d. Added water
- 30) Milk is the only source of _____ in nature.
a. Calcium
b. Phosphorous
c. Lactose
d. Fatty acids
- 31) Which of the following is not an important reason for a five day-seven degree shelf life test?
a. Psychotropic bacteria reproduce at this temperature
b. Meaningful data can be available for control application in a reasonable time
c. It lowers variability among cartons of milk
d. The Temperature is at or near the maximum at which milk will be stored
- 32) The ideal cleaning material for removing milk stone from milking equipment surfaces is _____.
a. Acidic detergent
b. Phosphate
c. Surfactant
d. Chelate
- 33) The somatic cell count standard for Grade A raw milk is _____ or less per milliliter of milk.
a. 500,000
b. 750,000
c. 1,000,000
d. 1,500,000

- 34) The ability of lipase in milk to attack milk fat and produce a rancid off flavor is enhanced by:
- a. Excessive agitation of warm raw milk**
 - b. Poorly cleaned milking equipment
 - c. Exposing milk to sunlight
 - d. Feeding cows moldy hay
- 35) In _____ when the Capper-Volstead Act was enacted, cooperatives were given the right and power to organize producers of a farm commodity to its fullest extent.
- a. 1829
 - b. 1959
 - c. 1729
 - d. 1929**
- 36) The two most important etiologic agents of mastitis are _____.
- a. Streptococcus agalactiae and Staphylococcus aureus**
 - b. Streptococcus uberis and Streptococcus dysgalactiae
 - c. Pseudomonas aeruginosa and coliform bacteria
 - d. Klebsiella and actinomycetes
- 37) _____ cause(s) off flavors in milk such as acid, high acid, or sour milk.
- a. Chemical adulterants
 - b. Microorganisms**
 - c. Sediment
 - d. Weeds
- 38) Aflatoxins sometimes found in dairy feeds are produced by:
- a. Protozoa
 - b. Bacteria
 - c. Mold**
 - d. Yeasts
- 39) With the exception of _____, all of the following off flavors of milk are caused by bacteria.
- a. Bitter
 - b. Malty
 - c. Yeasty
 - d. Salty**

- 40) The Grade A Pasteurized Milk Ordinance (PMO) specifies requirements for the production of Grade A raw milk for pasteurization and is recommended by _____.
- a. **The Food and Drug Administration**
 - b. The Small Business Administration
 - c. The U.S. Department of Agriculture
 - d. The National Committee on Milk
- 41) In Federal order markets, milk sold for consumption in fluid form is in _____.
- a. Class IV
 - b. Class III
 - c. Class II
 - d. **Class I**
- 42) Milk covered by Federal milk marketing orders is _____.
- a. **Grade A**
 - b. Grade B
 - c. Grade C
 - d. Grade A, B, C
- 43) The largest percentage of the U.S. milk supply is utilized in the production of _____.
- a. Cream and specialty sales
 - b. **Cheese**
 - c. Frozen dairy desserts
 - d. Evaporated, condensed and dry products
- 44) Operating costs of Federal orders are paid by _____.
- a. The State Department of Agriculture
 - b. The Federal government
 - c. The milk producers
 - d. **The milk handlers**
- 45) One objective of a federal order is to _____.
- a. Assure all dairy farmers an adequate income
 - b. **Assure consumers an adequate supply of pure, wholesome milk**
 - c. Assure that all dairy plants receive an adequate supply of milk
 - d. Prevent surpluses of milk in the marketplace
- 46) Federal Definitions and Standards of Identity specify that Whole Milk contain not less than _____.
- a. 3.00 percent milk fat and 8.25 percent solids-not-fat
 - b. 3.50 percent milk fat and 8.50 percent solids-not-fat
 - c. 3.50 percent milk fat and 8.00 percent solids-not-fat
 - d. **3.25 percent milk fat and 8.25 percent solids-not-fat**

- 47) Cheddar cheeses sold in the United States, which are not made from pasteurized milk, must be ripened at least _____ days.
- 30
 - 60**
 - 120
 - 150
- 48) The establishment of a Federal milk marketing order is generally initiated by _____.
- Dairy farmers, through their cooperative association**
 - Milk handlers in the market
 - Consumers
 - Dairy farmers, milk handlers and consumers
- 49) A milk order, including pricing and other provisions, becomes effective only after approval by _____.
- Consumers
 - Dairy farmers**
 - Milk processors
 - Secretary of Agriculture
- 50) Federal milk marketing orders give _____ an active voice in determining minimum milk prices through public hearings.
- Milk activists
 - Milk handlers**
 - Milk processors
 - Milk consumers
- 51) The rules States adopt to govern the production, processing, packaging and storage of Grade A milk are based on _____.
- The Code of Federal Regulations
 - The Pasteurized Milk Ordinance and Code**
 - USDA Rules and Regulations
 - The Pure Milk Act of 1937
- 52) Flavors of milk may be caused in general by _____.
- Water content of the milk
 - Temperature that milk is stored
 - Feeds consumed by the cow**
 - Amount of sun light the cow receives
- 53) The major cause of the salty flavor in milk is _____.
- The large intake of salt by the cow
 - Associated with sunlight exposure
 - Mastitis**
 - Bacteria

- 54) _____ is a test for rancidity.
- Acid degree value**
 - Cryoscope
 - Disc assay
 - Titrateable acidity
- 55) Mastitis in milk _____.
- Has a direct effect on cheese yield**
 - May cause increased rancidity
 - Decreases calcium content
 - Increases protein content
- 56) Which of the following is not one of the duties of the bulk milk hauler, who plays a critical role in milk handling?
- Checking milk temperature
 - Making sure equipment has been cleaned correctly**
 - Examining milk to determine appearance
 - Collecting a representative sample to be used for tests
- 57) Milk with an Acid Degree Value (ADV) of 1.0 or above will have a detectable _____ flavor.
- Rancid**
 - Malty
 - Acidic
 - Fruity
- 58) The four primary taste sensations are _____.
- Bitter, metallic, sour, sweet
 - Bitter, salt, sour, sweet**
 - Metallic, salt, sour, sweet
 - Burnt, bitter, salt, sour
- 59) Lactose is the principal _____ in milk.
- Fat
 - Protein
 - Carbohydrate**
 - Mineral
- 60) The most effective and economical means of reducing the exposure of cows to mastitis causing microorganisms is to _____.
- Isolate animals with clinical mastitis
 - Disinfect or sterilize milking machine inflation's between cows
 - Wear rubber or plastic gloves during milking and disinfect the gloves between cows
 - Use a bactericide for disinfecting the teats after milking**

- 61) 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 ___ degrees F within two hours after milking.
- 25
 - 45**
 - 60
 - 70
- 62) A consumer found an off-flavor in milk packaged in transparent plastic and exposed to high intensity fluorescent light. The off-flavor probably was
- High acid
 - Bitter
 - Oxidized**
 - Rancid (lipolyzed)
- 63) Which group of flavors cannot be detected by odor?
- Bitter, salty**
 - High acid, rancid
 - Feed, garlic/onion
 - Metallic/oxidized, malty
- 64) Milk used to make ice cream would be priced in what Federal Order class?
- Class I
 - Class II**
 - Class III
 - Class IV
- 65) _____ is the time after processing during which a dairy product normally remains suitable for human consumption.
- Code date
 - Product life
 - Package date
 - Shelf date**
- 66) The off flavor most likely to be found in milk that has not been cooled properly is:
- Sour**
 - Rancid
 - Oxidized
 - Bitter
- 67) The Babcock test is a rapid, simple and accurate test for:
- Water in milk
 - Titrateable acidity
 - Fat content**
 - Nonfat milk solids content

- 68) To remove fat from milking equipment use:
- a. Alkaline cleaner in hot water**
 - b. Alkaline cleaner in cold water
 - c. Acid cleaner in cold water
 - d. Acid cleaner in hot water
- 69) Quality of grade A milk is:
- a. Not controlled by Federal Orders**
 - b. The first consideration in pooling milk
 - c. A part of the testing by Market Administrators
 - d. Only checked if there is excess milk
- 70) Federal Milk Marketing Orders provide or describe:
- a. Sanitary standards used for grade A
 - b. Milk purchased by dealers
 - c. Milk sold by farmers
 - d. Payment made to milk producers for milk**
- 71) It takes approximately _____ lbs. of whole milk to make one pound of whole milk cheddar cheese.
- a. 5
 - b. 10**
 - c. 13
 - d. 22
- 72) Federal Milk Marketing Orders are a mechanism for:
- a. The most economical utilization of milk
 - b. Finding a market for every producer's milk
 - c. Economical transportation of milk
 - d. Market stabilization**
- 73) Cow's milk contains _____ percent lactose.
- a. Three
 - b. Four
 - c. Five**
 - d. Six
- 74) For the maximum intake of calcium, one should consume_____.
- a. Whole Milk
 - b. 2% Milk
 - c. 1% Milk
 - d. Skim Milk**

- 75) While some extra-label drugs can be used by food-producing animals, others cannot. Which of the following is/are an illegal drug(s)?
- Clenbuterol**
 - Penicillin
 - Tetracycline
 - Ivomec
- 76) The fat in one serving of whole milk (8 ounces) provides _____ calories.
- 85
 - 90**
 - 95
 - 100
- 77) The most prevalent off flavor of fluid milk is _____.
- Malty
 - Oxidized
 - Flat
 - Feed**
- 78) The microbiological standard for Grade A raw from single procedure is _____ bacteria per millimeter of milk prior to co-mingling with milk from other producers.
- 200,000
 - 150,000
 - 100,000**
 - 50,000
- 79) Pasteurization is the process of heating every particle of milk and milk products to the minimum required _____ and holding it continuously for the minimum required _____ in equipment that is properly designed and operated.
- Temperature and length
 - Time and temperature
 - Temperature and time**
 - Time and length
- 80) The major reason milk from cows treated with antibiotics must be withheld from the milk supply is because _____.
- A large proportion of the human population is sensitive to antibiotics**
 - Antibiotics increase the somatic cell count of milk
 - Antibiotics cause an off-flavor in milk
 - Antibiotics kill some of the good bacteria found in milk

- 81) When cows have mastitis, the protein content of milk may be higher, but the cheese yield is lower because of a decrease in _____ protein.
- Lysine
 - Casein**
 - Tryptophan
 - Whey
- 82) Bacteria that survive specific heat treatment are said to be _____.
- Psychotropic
 - Coliform
 - Psychrophilic
 - Thermoduric**
- 83) _____ is exposure of hot milk or milk product to reduced pressure to affect the removal of volatile substances, especially those that enter milk from feed.
- Vaporization
 - Infusion heater
 - Vacuumization**
 - Vac Pac process
- 84) A high acid flavor (sour) in milk is caused by _____.
- Growth of bacteria in the milk**
 - Exposure of cows to acid rain
 - Drinking hard water
 - Absorption of acid from corn silage
- 85) The enzyme _____ is almost completely inactivated during pasteurization.
- Lactose
 - Acid glycerol
 - Alkaline phosphatase**
 - Free fatty acids
- 86) A pooling method, where by, handlers with higher than average utilization pay into and handlers with lower than average utilization receives payment from is called _____.
- Base excess pricing
 - Louisville take out and pay back
 - Individual handler pools
 - Producer settlement fund**
- 87) The absence of _____ and _____ is not an accident, because they would catalyze oxidation, their producing metallic or oxidized flavors.
- Lead-casein
 - Boron-tin
 - Iron-copper**
 - Zinc-brass

- 88) The CMT test results that indicate a somatic cell count of 400000 to 1500000 are _____.
a. Mixture thickens with slight gelation
b. Viscous gel forms, mass adheres to paddle
c. Distinct precipitate forms, but no gel
d. Slight precipitate forms and tends to disappear
- 89) Which of the following is **not** a part of the establishment of a federal marketing order?
a. A public hearing is held for the producers-handlers and the public
b. Must be approved by 2/3 of the producers supplying 3/4 of the milk
c. Cooperative associations of milk producers petition the U.S. Secretary of Agriculture
d. A producer cooperative may vote all its members who deliver milk during a certain period.
- 90) To reduce the feed flavor in milk to acceptable levels, cows should be removed from offending feeds _____ hours before milking.
a. 1-2
b. 2-4
c. 4-6
d. 6-8
- 91) The only persons regulated by federal orders are _____.
a. Farmers
b. Truckers
c. Handlers
d. Retail store owners
- 92) 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
- 93) _____ is the cause of the rancid flavor in milk.
a. Feeding high moisture corn
b. Feeding haylage
c. Storing milk in the sunlight
d. Extreme agitation of raw milk

- 94) Which of the following does not promote metallic/oxidized off flavor in milk?
- a. **Hypochlorite sanitizer**
 - b. Sunlight
 - c. Fluorescent light
 - d. Copper
- 95) Whole milk contains _____ percent protein.
- a. 1.5-2.5
 - b. 2.5-3.5
 - c. **3.5-4.0**
 - d. 4.0-4.5
- 96) Which of the following is not an objective of milk evaluation?
- a. Determining the presence of desirable characteristics
 - b. **Determining one brand of milk from another**
 - c. Determining whether one sample differs from another
 - d. Determining presence and magnitude of undesirable characteristics
- 97) Mastitis infecting microorganisms almost invariably gain entrance to the mammary gland via the _____.
- a. Caudal base
 - b. Blind quarter
 - c. **Streak canal**
 - d. Feed
- 98) A _____ cup is a cup with fine wire mesh on top used to detect the presence of abnormal milk.
- a. Striated
 - b. Mesh
 - c. Streak
 - d. **Strip**
- 99) A _____ needs to be applied to the teat end in order for a milking machine to remove milk.
- a. Massaging action
 - b. Pulsation
 - c. **Vacuum**
 - d. Pressure
- 100) Which of the following four primary taste sensations is correctly matched with the causal agent?
- a. Salty-sugar
 - b. **Bitter-quinine**
 - c. Sweet-lactic acid
 - d. Sour-table salt

- 101) Some streptococci that produce lactic acid also produce certain aldehydes, which impart a _____ flavor.
- a. **Malty**
 - b. Bitter
 - c. Salty
 - d. Metallic
- 102) By using a _____ with plastic beads of varying density, nonfat solids in milk can be rapidly estimated.
- a. Lactometer
 - b. **Hydrometer**
 - c. Humidoscope
 - d. Polyscope
- 103) The two main proteins in milk are _____ and _____.
- a. Lactose, Lactalbumin
 - b. **Casein, Lactalbumin**
 - c. Ascorbic, Thiamin
 - d. Colgate, Casein
- 104) Vitamin _____ was first discovered in milk fat and is important to eyesight.
- a. **A**
 - b. B
 - c. C
 - d. D
- 105) Milk contains all the known vitamins and is an especially good source of _____
- a. Cyanocobalmin
 - b. **Riboflavin**
 - c. Ascorbic Acid
 - d. Thiamine
- 106) Milk is a good source of all water-soluble vitamins except for _____.
- a. Cyanocobalmin
 - b. Riboflavin
 - c. **Ascorbic Acid**
 - d. Thiamine
- 107) _____ is a milk process that makes milk more easily digested by those with a sensitive digestive system.
- a. Ionization
 - b. Evaporation
 - c. Pasteurization
 - d. **Homogenization**

- 108) _____ amino acids are commonly found in milk proteins, including the essential amino acids.
- 7
 - 12
 - 14
 - 19**
- 109) Summer milk has been estimated to contain 1.6 times as much vitamin ____ as winter milk.
- A**
 - B
 - C
 - D
- 110) The milk becomes the property of the buyer once....
- The transport truck reaches the plant
 - It is loaded into the transport truck on the farm**
 - The transport truck leaves the farm
 - It is unloaded into the processor's bulk tanks
- 111) Cows with _____ have a higher incidence of mastitis because physical injury is more likely.
- Sickled hocks
 - Horns
 - Lower foot angles
 - Pendulous udders**
- 112) Which of the following is untrue concerning the federal milk marketing orders?
- They are legal instruments
 - It is a uniform system of classified pricing
 - Producers are not guaranteed a market
 - Sanitary restrictions on production are imposed on producers.**
- 113) The _____ or uniform price is determined by the proportion of the total delivery used in products of these classes.
- Classified
 - Average
 - Parity
 - Blend**
- 114) Under federal orders, dairy farmers receive their milk checks _____.
- Once or twice monthly**
 - Weekly
 - Bi-monthly
 - Directly from the FSA office

- 115) To defray the cost of federal orders, handlers are assessed ____ per hundredweight of milk received.
- a. 1-3 cents
 - b. 2-5 cents**
 - c. 3-4 cents
 - d. 15 cents
- 116) Which is a true statement concerning federal milk marketing orders?
- a. Public hearings are held so that all interested parties may present their views.**
 - b. They remove the need for cooperatives.
 - c. They are designed to weaken the bargaining power of single large dairy farmers.
 - d. They assure the corrected weighting, testing and sanitary conditions of milk.
- 117) The hormone oxytocin is released by the ____ gland. This act stimulates the mammary gland.
- a. Pituitary**
 - b. Sweat
 - c. Endocrine
 - d. Vascular
- 118) Rubber parts readily absorb ____ and need to be cleaned in an alkaline detergent.
- a. Protein
 - b. Carbohydrates
 - c. Milk fat**
 - d. Minerals
- 119) The main objection to dirt and milk stone on parts is ____.
- a. Vacuum fluctuations
 - b. Poor milkers function
 - c. Poor looks
 - d. Increased bacterial count**
- 120) Badly dented or damaged milkers unit parts are caused by
- a. Strong chemicals
 - b. Improper design
 - c. Careless handling**
 - d. Solvents

- 121) By regulation, milk from cows treated with antibiotics usually must be withheld for ____ hours.
- a. **48 – 72**
 - b. 30 – 60
 - c. 48 – 108
 - d. 72 – 96
- 122) Rules developed by the _____ are designed to protect the health and welfare of consumers.
- a. United States Department of Agriculture (USDA)
 - b. Protein and Lactose Organization (PLO)
 - c. Future Farmers of America (FFA)
 - d. **Food and Drug Administration (FDA)**
- 123) The standard plate count (SPC) estimates the total numbers of ____ microorganisms.
- a. Mild
 - b. Yeast
 - c. Anaerobic
 - d. **Aerobic**
- 124) The predominant bacteria of milk that produces lactic acid, which is responsible for the sour taste of milk are the:
- a. **Streptococci**
 - b. Psychrophilic
 - c. Coliform
 - d. Streptococcus
- 125) The traditional method of pricing milk has used a milk fat differential of one tenth of one percent from a milk fat base of _____ percent.
- a. 3.0
 - b. 3.2
 - c. **3.5**
 - d. 3.7
- 126) The United States government purchases surplus ____ from the commercial market under the dairy price support program.
- a. Fluid milk products, butter, cheese
 - b. **Cheese, nonfat dry milk, butter**
 - c. Butter, evaporated milk, ice cream
 - d. Ice milk, yogurt, cottage cheese

- 127) The feed additive isoacid gives a _____ pound daily milk response, with maximum response in early lactation.
- a. 2 to 4
 - b. 4 to 6**
 - c. 6 to 8
 - d. 8 to 10
- 128) Mixture of milk and cream containing not less than 10.5 percent milk fat, but less than 18 percent milk fat, is the definition of
- a. Light whipping cream
 - b. Light cream
 - c. Half-and-half**
 - d. Heavy cream
- 129) One of the mechanisms used by the USDA to remove surplus dairy products from the supply is to subsidize manufacturers who sell overseas at a loss. This is called the
- a. Price Support Program
 - b. Butter-Powder Formula
 - c. Dairy Export Incentive Program**
 - d. Commodity Credit Program
- 130) Under which of the following weather conditions would you expect to observe the greatest decrease in milk yield per cow?
- a. Cold and dry
 - b. Hot and humid**
 - c. Cool and humid
 - d. Warm and dry
- 131) Although milk from the cow is processed, it is not an engineered or fabricated food and contains about _____ % solids.
- a. 3.5
 - b. 13**
 - c. 76
 - d. 87
- 132) Dairy cows need _____ day dry periods for rejuvenation of secretory tissue and restoration of body condition.
- a. 30
 - b. 60**
 - c. 90
 - d. 120

- 133) Due to high leukocyte counts, farmers should not use the CMT before the _____ day after calving or test milk from cows that are being dried off.
- First
 - Second
 - Third**
 - Fourth
- 134) From the mid 1950's until 2009, the size of the U.S. dairy herd has:
- Decreased by 50%**
 - Remained static
 - Increased by 50%
 - More than doubled mirroring the population growth
- 135) From the mid 1950's until 2009, individual production per cow has:
- Remained static
 - Increased by 50%
 - Increased by 100%
 - Increased by 400%**
- 136) The first milk produced after parturition is called:
- Colostrum**
 - Celestial
 - Serial
 - Coliseum
- 137) Transitional milk is the label given to the milk produced in:
- One retail region and moved to another retail region for processing
 - From the Colostrum stage to 11th milking which can not be legally marketed for human consumption**
 - From the truck to the holding silos, not yet in the production cycle
 - Produced at the end of a lactation but before the cow is transitioned into the dried state
- 138) It requires _____pound(s) of milk to produce one pound of butter.
- 1
 - 11
 - 22**
 - 33
- 139) It requires _____pound(s) of milk to produce one gallon of gourmet ice cream.
- 8
 - 12**
 - 16
 - 24

- 140) To prevent milk fat from separating itself from the fluid portion of the milk is:
- Homogenized**
 - Pasteurized
 - Sterilized
 - Thermalized
- 141) Fat globules in raw milk average about _____ in diameter:
- 1/25,000 of an inch, more or less 1 micron
 - 6/25,000 of an inch, more or less 6 microns**
 - 1/2,500 of an inch, more or less 100 microns
 - 1/250 of an inch, more or less 1000 microns
- 142) Evaporated milk has been preheated to stabilize the protein, followed by the removal of:
- 30% of the water
 - 60% of the water**
 - 90% of the water
 - All of the fat
- 143) Condensed milk on the grocery shelf may have _____ added.
- Salt
 - Minerals
 - Sugar**
 - Cream
- 144) The major difference between Evaporated and Condensed milk is:
- Evaporated milk has less water than condensed milk
 - Evaporated milk can be stored non-refrigerated, while condensed milk requires refrigeration**
 - Condensed milk has a lower fat content than evaporated milk
 - Condensed milk comes in smaller size containers than evaporated milk
- 145) Dry milk must have less than _____% moisture by weight.
- 5%**
 - 10%
 - 15%
 - 25%
- 146) Dry milk can be stored for long periods of time:
- In refrigerated vaults
 - At temperatures above 150 degrees
 - In an open container in the cabinet
 - In a sealed atmosphere of nitrogen or carbon dioxide**

- 147) "Cultured" in front of the name of a milk product indicates:
- a. Product is older and more mature
 - b. Product is highly refined
 - c. Product has appropriate bacteria added to it**
 - d. Product has been through a school and is more expensive
- 148) A "acidified" label on a milk product indicates that the product was produced by:
- a. Souring the milk**
 - b. Enriching the milk with added iron
 - c. Cows consumed acid rain water
 - d. Passing the milk through a reverse osmosis filtration system
- 149) Cottage cheese from the grocery shelf must contain no less than:
- a. .5% fat
 - b. 1% fat
 - c. 2% fat
 - d. 4% fat**
- 150) Low fat cottage cheese must contain a maximum of:
- a. .5% fat
 - b. 1% fat
 - c. 2% fat**
 - d. 4% fat
- 151) Curd is the _____ during the cheese making process.
- a. A region which supplies substantial components required
 - b. Material found in the stomach of young calves necessary
 - c. Liquid portion at the bottom on the container that is hard to dispose of
 - d. Custard-like substance formed at the top of the container**
- 152) Butter is made from milk and/or cream and must contain a minimum of:
- a. 5% fat
 - b. 20% fat
 - c. 50% fat
 - d. 80% fat**
- 153) Cottage cheese is a soft, unripened cheese with approximately _____ moisture content.
- a. 20%
 - b. 50%
 - c. 80%**
 - d. 100%

- 154) Parmesan and/or Romano cheese are very hard grated/shaken cheese with _____ moisture content.
- a. 20%
 - b. 30%
 - c. **50%**
 - d. 70%
- 155) Rennet is used in many milk products to produce a thicker bodied product. Natural rennet comes from:
- a. Mines in Eastern China
 - b. Microscopic plants growing the ocean
 - c. **Inside the stomach of young calves**
 - d. Composted cow manure treated with UV rays
- 156) Cultured sour cream is required by Federal standards to have a minimum of _____.
- a. 3.25% fat
 - b. 5% fat
 - c. 10% fat
 - d. **18% fat**
- 157) Sour Cream frequently develops a bitter flavor due to continued bacterial proteolytic enzyme activity when stored for more than:
- a. 1 week
 - b. **3-4 weeks**
 - c. 6-8 weeks
 - d. 10-12 weeks
- 158) Yogurt is manufactured from fresh, whole, low fat or skim milk that is heated before fermentation. However, Federal standards require yogurt to have a minimum of _____ fat.
- a. .5%
 - b. 1%
 - c. 2%
 - d. **3.25%**
- 159) Low-fat yogurt must have a minimum of _____ fat and a maximum of _____ fat.
- a. 1%, 4%
 - b. .5%, 2.5%
 - c. **.5%, 2%**
 - d. 1%, 3.25%

- 160) Non-fat yogurt must have a maximum of _____ fat prior to the addition of bulky flavors.
- .5%
 - 1%
 - 2%
 - 3.25%
- 161) Cream is a liquid milk product separated from the fluid milk that must contain a minimum of:
- 4% fat
 - 10% fat
 - 14% fat
 - 18% fat**
- 162) Heavy cream (whipping cream) contains a minimum milk fat of:
- 10%
 - 18%
 - 30%
 - 36%**
- 163) Dry cream is produced by removing the water from pasteurized milk and/or cream. Dry cream is required to contain a minimum of:
- 18% fat
 - 30% fat
 - 40% fat**
 - 75% fat
- 164) Dry cream is produced by removing the water from pasteurized milk and/or cream. Dry cream will have a maximum milk fat of _____ for economic factors.
- 18%
 - 30%
 - 40%
 - 75%**
- 165) Buttermilk is the product resulting from:
- Addition of extra fat to raw fluid milk
 - Removal of the butter (fat particles) form raw fluid milk**
 - Heating of both butter and milk to facilitate the blending of them together
 - Artificial product produced using non-saturated vegetable oils
- 166) Two states dominate the total U.S. cheese production. These two states are:
- Texas and California
 - Texas and Florida
 - New York and Wisconsin
 - Wisconsin and California**

- 167) Some soft serve frozen dairy products have replaced milk fat with:
- Peanut butter
 - Honey
 - Fruits
 - Vegetable oil**
- 168) By FDA definition of an imitation product, which of the following is NOT true:
- Taste like the real product it represents
 - Has the same nutritional value as the real product it represents**
 - Looks like the real product it represents
 - Imitation products are not regulated by the FDA
- 169) A substitute product by FDA definition meets all of the following statements except:
- Taste like the real product it represents
 - Has the same nutritional value as the real product in replaces
 - Looks like the real product it represents
 - Imitation products are not regulated by he FDA**
- 170) Some dairy food products have a “REAL” seal on the package. This seal cannot be placed on a package that does NOT adhere to the following standards.
- Produced from U.S. milk
 - Meets federal and state standards
 - Imitation or substitute foods
 - Produced from NON-organic sources**
- 171) Osteoporosis may be reduced by consuming adequate quantities of milk and/or milk products. Osteoporosis is the:
- Inflammation of the skin cells causing hair loss and scaling of the skin
 - Deterioration of the soft tissue in the retina, leading to blurry vision and poor eye sight
 - Loss of bone mass due to decrease in the bone matrix and minerals**
 - Development of a hard calloused layer of skin upon the sole of the foot
- 172) Properly processed UHT milk may be stored at room temperature for:
- 24-28 hours
 - 10-15 days
 - Several weeks**
 - 6 months
- 173) Milk sold through commercial outlets is certified to be from herds free of:
- B.S.T.
 - Displaced Abomasums
 - Broken Udder Suspensory Ligaments
 - Tuberculosis**

- 174) Humans may contract _____ from using raw cows' or goats' milk, should the animals have brucellosis.
- Undulant fever**
 - Mumps
 - Whooping cough
 - Night blindness
- 175) Milk is produced from female's mammary glands. These mammary glands are examples of a:
- Adrenal gland
 - Excretory gland
 - Absorbatory gland
 - Exocrine gland**
- 176) The secretory tissue within the mammary gland is a grapelike structure called:
- Alveoli**
 - Clitoris
 - Glanus cistern
 - Annular ring
- 177) The California Mastitis Test (CMT) asks that you used only _____ milk.
- Colostrum
 - Milk after dry-off
 - The first stream during milking
 - The 2nd stream during milking**
- 178) How many cc's of milk is required for the CMT?
- 6 cc
 - 4 cc
 - 2 cc**
 - ½ cc
- 179) The CMT should be read within _____.
- 10 sec
 - 20 sec**
 - 30 sec
 - 40 sec
- 180) What is the healthiest range for somatic cell counts?
- 400,000-1,200,000
 - 200,000-400,000
 - 0-200,000**
 - 5,000,000+

- 181) If the CMT has a somatic cell count of 1,200,000 to 5,000,000 what is the interpretation?
- a. Serious mastitis**
 - b. Subclinical mastitis
 - c. Negative (healthy)
 - d. None of the above
- 182) What does HACCP stand for?
- a. High Altitude Computer Control Protocol
 - b. High Aptitude Critical Consideration and Punctuality
 - c. Help Animals in Confined Conditions and Preserves
 - d. Hazard Analysis and Critical Control Points**
- 183) Milk must be held at 191 degrees F for _____ to be considered pasteurized
- a. 30 minutes
 - b. 1 second**
 - c. 2 seconds
 - d. 5 minutes
- 184) According to HACCP, what is a receiving station?
- a. Where supplies are received
 - b. Where trucks receive milk
 - c. Anywhere raw milk is received, handled, stored, etc**
 - d. Where cows enter to be milked
- 185) How often will HACCP inspect each Dairy Farm?
- a. A minimum of every 6 months**
 - b. A minimum of once each year
 - c. A minimum of once each month
 - d. A minimum of every 2 years
- 186) When sanitizing milking equipment with water, the temperature must be a minimum of 170 degrees F and the utensils are to be under the flow of water for _____ minutes.
- a. 10
 - b. 15
 - c. 1
 - d. 5**
- 187) Milk protein allergies are a form of milk intolerance. These generally occur only in infants and is usually outgrown by:
- a. 6 month of age
 - b. 12 months of age
 - c. 18 months of age
 - d. 24 months of age**

- 188) Low levels of the enzyme lactase may lead to lactose intolerance. Symptoms of lactose intolerance include ALL of the following EXCEPT:
- a. Headaches**
 - b. Nausea
 - c. Diarrhea
 - d. Abdominal cramps
- 189) The maximum moisture content of Cheddar cheese is:
- a. 12%
 - b. 23%
 - c. 30%
 - d. **39%**
- 190) An example of an extra hard cheese is:
- a. **Parmesan**
 - b. Muenster
 - c. Ricotta
 - d. Brie
- 191) To add the mold to the blue cheese it is mainly:
- a. Injected into the cheese**
 - b. Grown on the cheese
 - c. Mixed in the whey mixture
 - d. None of the above
- 192) What is the average fat content of Brie?
- a. 15%
 - b. 30%
 - c. 45%**
 - d. 65%
- 193) Cream cheese is different from cottage cheese because:
- a. Cream cheese is an acid curd and cottage cheese is not
 - b. Cream cheese is made from cows' milk and cottage cheese is not
 - c. Cream cheese requires a started culture of bacteria and cottage cheese does not**
 - d. All of the above are true for both Cream cheese and cottage cheese
- 194) Gouda can be described by all of the following except:
- a. Semi-hard
 - b. Yellow colored
 - c. Rind coating
 - d. Tart flavor**

- 195) Monterey Jack cheese has a maximum moisture content of _____ %
- a. 24
 - b. 36
 - c. 44**
 - d. 60
- 196) To make Mozzarella cheese the pasteurized milk is curded at _____ degrees F.
- a. 45
 - b. 88**
 - c. 145
 - d. 190
- 197) The advantage of making processed cheese is:
- a. Better taste
 - b. Marketing
 - c. Extended shelf-life**
 - d. All of the above
- 198) The current U.S. per capita consumption of milk is approximately _____ gallons per year.
- a. 15
 - b. 20**
 - c. 25
 - d. 28
- 199) Today, an average dairy cow produces approximately _____ quarts of milk per cow annually.
- a. 5500
 - b. 6500
 - c. 6800
 - d. 8800**
- 200) In what year were Federal milk-marketing orders reformed?
- a. 1995
 - b. 2000**
 - c. 2002
 - d. 2004
- 201) Milk marketed, today as low-fat milk has no more than _____ % milk fat.
- a. 3.25
 - b. 2.5
 - c. 2
 - d. 1**

- 202) The whey proteins in milk constitutes about _____% of the protein found in milk.
- a. 10
 - b. 15
 - c. **18**
 - d. 20
- 203) Adolescents have a recommendation of _____ milligrams of calcium per day.
- a. 1000
 - b. 1200
 - c. **1300**
 - d. 1500
- 204) If vitamin A is added to milk, it must be at a level of no less than _____ international units (I.U.) per quart.
- a. 400
 - b. 1000
 - c. 1500
 - d. **2000**
- 205) Butter production now accounts for _____% of the total milk supply.
- a. 8
 - b. 15
 - c. **18**
 - d. 25
- 206) Light whipping cream has a minimum of _____% milk fat.
- a. 18
 - b. **30**
 - c. 35
 - d. 40
- 207) Today, milk that has been ultra pasteurized must have been heated at or above _____ degrees F for at last _____ seconds.
- a. 191, 2
 - b. 212, 3
 - c. 260, 2
 - d. **280, 2**
- 208) It takes approximately _____ pounds of skim milk to make a pound of dry curd cottage cheese.
- a. 4.3
 - b. **7.3**
 - c. 7.8
 - d. 8.6

- 209) It takes approximately _____pounds of skim milk to make one pound of non-fat dry-milk.
- a. 10
 - b. **11**
 - c. 12
 - d. 20
- 210) The leading state in 2009 in pounds of milk per dairy cow was:
- a. **New Mexico**
 - b. California
 - c. Arizona
 - d. Wisconsin
- 211) The national average milk production per cow in the U.S. is approximately _____ pounds per year.
- a. 18,400
 - b. 19,500
 - c. **20,500**
 - d. 22,600
- 212) Nearly _____% of the U.S. milk supply is used in the production of cheese.
- a. 15
 - b. 30
 - c. 35
 - d. **40**
- 213) Fluid milk accounts for _____% of the U.S. milk supply.
- a. **15**
 - b. 20
 - c. 22
 - d. 25
- 214) The top ten states in the U.S. now account for about _____% of the total milk supply.
- a. 50
 - b. 60
 - c. 65
 - d. **75**
- 215) The leading state in total milk production is?
- a. Wisconsin
 - b. Minnesota
 - c. **California**
 - d. New York

- 216) Which fluid milk product accounted for the largest use of fluid milk production sales?
- a. Flavored milk
 - b. **Reduced/low-fat milk**
 - c. Non-fat milk
 - d. Whole milk
- 217) Ice cream, including both hard and soft serves, represents _____% of the entire frozen dairy product market.
- a. 20-22
 - b. **25-26**
 - c. 28-30
 - d. 30-32
- 218) Which month during the year is the highest production month for ice cream?
- a. March
 - b. September
 - c. **June**
 - d. August
- 219) California is the leading state in production of ice cream, which state was second?
- a. Texas
 - b. **Indiana**
 - c. Minnesota
 - d. Colorado
- 220) Which of the following states listed is NOT in the top five for production of cheese?
- a. Idaho
 - b. Wisconsin
 - c. Minnesota
 - d. **New York**
- 221) The top five state in the production of cheese accounted for almost _____% of all U.S. cheese production.
- a. 29
 - b. 42
 - c. 51
 - d. **69**

- 222) The largest production of Italian cheese went to the production of _____ cheese.
- Cheddar
 - Brie
 - Mozzarella**
 - Provolone
- 223) Which one of the following “selected dairy products” has the greatest production in the U.S.?
- Non-fat dry milk
 - Butter
 - Yogurt**
 - Evaporated milk
- 224) The pound per capita of reduced and low-fat milk was _____ pounds/year.
- 32
 - 45
 - 50
 - 85**
- 225) The largest increase per capita in all dairy products in 2009 was:
- Cheese
 - Yogurt**
 - Low-fat milk
 - Ice cream
- 226) According to USDA’s economic research service, total per capita of all fluid products was approximately _____ pounds.
- 110
 - 137
 - 163
 - 177**
- 227) Approximately _____% of the frozen dessert market was ice cream. (Hard and soft and low-fat/non-fat)
- 56
 - 60.5
 - 70.7
 - 86.7**
- 228) More than _____ % of American household purchase cheese; including cream cheese.
- 69
 - 78
 - 86
 - 96**

- 229) Cheese consumption in the U.S. was approximately _____pounds per capita.
- 32
 - 36
 - 45
 - 51
- 230) The two most popular cheese varieties in the U.S. are?
- Cheddar and Monterey Jack
 - Cheddar and Colby
 - Cheddar and Mozzarella**
 - Cheddar and Swiss
- 231) The Italian cheese with the second largest per capita consumption was?
- Parmesan
 - Provolone**
 - Romano
 - Ricotta
- 232) The largest supermarket sales of cheese by type was:
- Cheddar**
 - Mozzarella
 - Processed American
 - Colby Jack
- 233) In 2009, the annual farm milk price was about \$_____ per hundredweight, down \$5.60 per hundredweight from 2008.
- 10.80
 - 12.80**
 - 14.10
 - 15.50
- 234) The milk-feed price ration (which relates the value of milk to the cost of feed) averaged _____in 2009 far below the 1999-2008 values.
- 1.78**
 - 1.9
 - 2.69
 - 2.89
- 235) The minimum price for all four classes of milk from the farm in 2009 compared to 2008:
- Increases slightly
 - Increased a large amount
 - Remained the same
 - Decreased**

- 236) The average Federal order price per hundredweight in 2009 for class 1 milk was _____ dollars per hundredweight.
- a. 10.89
 - b. 11.36
 - c. 13.10
 - d. **14.40**
- 237) The 2009 dairy export value was over 2 billion dollars down approximately _____ % over 2008.
- a. 28
 - b. 30
 - c. **40**
 - d. 52
- 238) The largest total exported dairy product by volume in 2009 was:
- a. Cheese and curd
 - b. **Dry whey**
 - c. Non-fat dry milk
 - d. Lactose
- 239) The country that was the largest purchaser of U.S. dairy products in 2009 was?
- a. Canada
 - b. China
 - c. **Mexico**
 - d. Japan
- 240) Five countries accounted for approximately _____ % of the total U.S. dairy exports.
- a. 39
 - b. **59**
 - c. 69
 - d. 79
- 241) The largest U.S. exports of a dairy product by dollars were?
- a. **Non-fat dry milk**
 - b. Cheese and curd
 - c. Whey and whey products
 - d. Lactose
- 242) The U.S. also imports certain dairy products. The dairy products imported which accounted for the largest dollar value was?
- a. Dry whey
 - b. Milk protein concentrates
 - c. Casein and casein products
 - d. **Cheese and curd**

243) Behind the U.S., the country, which averages the largest production per cow, is _____.

- a. **Japan**
- b. Canada
- c. Australia
- d. Argentina

244) The country which imported the largest amount of U.S. ice cream and related products was:

- a. Canada
- b. Japan
- c. Russia
- d. **Mexico**

245) The minimum fat content of cheddar cheese is?

- a. 20
- b. 33
- c. 40
- d. **50**

246) The cheese that has maximum moisture of 45% and a minimum of 45% fat and is a pasta filata cheese is?

- a. Swiss
- b. Mozzarella
- c. **Provolone**
- d. Cheddar

247) Low sodium cheddar cheese contains no more than _____ milligrams of sodium per pound of finished food.

- a. 56
- b. 45
- c. **96**
- d. 105

248) Which of the following cheeses did NOT originate in Italy?

- a. **Edam**
- b. Parmesan
- c. Provolone
- d. Mozzarella

249) Monterey Jack cheese has a moisture content of 44% percent and a minimum of _____% fat.

- a. 40
- b. 45
- c. 33
- d. **50**

- 250) If the dairy ingredients to be pasteurized have a fat content of 10% or more, the specified temperature shall be increased by _____degrees F.
- 2
 - 3
 - 5**
 - 10
- 251) Which of the following cheese is a unripen variety?
- Bleu
 - Cream**
 - Brie
 - Parmesan
- 252) One serving (8oz) of milk has about _____ milligrams of calcium.
- 90
 - 150
 - 200
 - 250**
- 253) Ice cream must weight a minimum _____pounds to the gallon.
- 3.5
 - 4.5**
 - 5.0
 - 5.25
- 254) The natural lipase enzyme contained in all raw milk is kept away from milk fat globules, thus preventing development of rancidity because the:
- Fat globule membrane, a protective layer, covers the fat globules**
 - The major protein, casein, ties up the lipase
 - Fat globules are too small to attract the enzyme until they are homogenized
 - Enzyme has to be activated by the heat of pasteurization
- 255) Cooperatives Working Together (CWT) is the _____program that aims to strengthen and stabilize milk prices by balancing supply and demand.
- State funded
 - Farmer-funded**
 - Federal-funded
 - None of the above
- 256) How long should Calf hutches be left empty between calves to prevent disease spread?
- 2 to 3 days
 - 3 weeks
 - 10 to 14 days**
 - 1 month

- 257) What stomach is a magnet typically used in to remove metal objects that cause Hardware disease?
- Abomasum
 - Omasum
 - Reticulum**
 - Rumen
- 258) Body condition scoring is one way to measure cow health. What is the ideal score for a milking cow?
- 1
 - 3**
 - 4
 - 5
- 259) The decision of a milk hauler to accept or reject milk at the producing farm:
- Depends on knowledge of milk quality and ability to smell off odors**
 - Must always be confirmed by tests for acidity
 - Must be made the day before pickup is scheduled
 - Both a & b
- 260) For every pound of dry matter, cows should consume how much water?
- 1 to 2 pounds
 - 4 to 5 pounds**
 - 10 to 15 pounds
 - 25 to 30 pounds
- 261) Which of the following fatty acids found in milk have been associated with health benefits in humans?
- Oleic acid
 - Conjugated Linoleum Acid**
 - Butyric Acid
 - Lactic Acid
- 262) What technology destroys 90 percent of BST found in milk?
- Pasteurization**
 - Homogenization
 - Hormonization
 - Reverse osmosis
- 263) What method of manure application is best to fully utilize nutrients, reduce risk of runoff, and lower odor complaints?
- Injecting**
 - Broadcasting
 - Surface application
 - Flood application

- 264) At refrigerated temperatures, butter will begin to lose some of its natural flavor after how long?
- a. Within 2 months
 - b. Within 6 months**
 - c. Within 1 year
 - d. Butter will not lose its natural flavor when stored properly
- 265) Why do protein and amino acids go hand in hand?
- a. Amino acids and proteins need to be found in a 2:1 ratio in all diets
 - b. Proteins are the building blocks of amino acids
 - c. Amino acids are the building blocks of protein**
 - d. Proteins link to amino acids in bone formation
- 266) When performing a CMT test, watch for color changes and gel formation. Milk from a normal quarter does which of the following?
- a. Forms a gelatinous mass clinging together in a strong reaction
 - b. Flows freely without change in viscosity**
 - c. Forms small clumps in a moderate reaction
 - d. Turns a deep purple color
- 267) New food plate guidelines recommended how many servings of dairy products per day?
- a. 5
 - b. 2
 - c. 4
 - d. 3**
- 268) What disease is caused by a worm that is taken up as larvae by cattle eating grass, penetrates the gut, and eventually matures to adult form in the respiratory tract?
- a. Tuberculosis
 - b. Heartworm
 - c. Trichinosis
 - d. Lungworm**
- 269) Which of these is a good nutritional strategy to maintain milk production in hot weather?
- a. Feed more grain
 - b. Increase protein concentration
 - c. Add more fat**
 - d. Milk slower

- 270) There are four classes of milk under federal orders and they provide for
- Classification according to the relative safety of each class
 - Payment for milk according to its quality
 - Payment for milk according to its cost of production
 - Payment for milk according to its end use**
- 271) Based on ice cream consumption figures, the second most popular flavor is
- Strawberry
 - Cookies n' cream
 - Vanilla
 - Chocolate**
- 272) Under Federal milk marketing orders Class III milk is used to make
- Ripened cheeses**
 - Cottage cheese
 - Butter and dry milks
 - Ice cream
- 273) According to a report compiled by the Institute for Food Technologists, _____ is now America's favorite at-home snack.
- Cheese
 - Yogurt**
 - Ice cream
 - Chocolate Milk
- 274) In regards to commodities, what best defines hedging?
- Taking no action
 - The act of buying and selling stock
 - The act of protecting yourself against price possibilities**
 - The act of buying and selling commodities
- 275) When it comes to fertilizing fields, what three nutrients are known as the "secondary nutrients"?
- Calcium, nitrogen, and water
 - Calcium, sulfur, and magnesium**
 - Nitrogen, phosphorus, potassium
 - Potassium, phosphorus, and zinc
- 276) A fluid milk product that contains at least 8.25% nonfat milk solids and no more than 0.5 gram of fat in a single serving of 8 fluid ounces is called
- Milk
 - Low-fat milk
 - Nonfat milk**
 - Reduced fat milk

- 277) What household cleaning agent has been found to cut odor in livestock manure by USDA-ARS scientists?
- a. Baking soda
 - b. Borax**
 - c. Dish soap
 - d. Window cleaner
- 278) The off-flavor that is seldom found except in pasteurized milk that has been stored too long is
- a. Foreign
 - b. Unclean**
 - c. High acid
 - d. Feed
- 279) According to the American Veterinary Medicine Association, what is the preferred method of dehorning cows?
- a. Caustic paste
 - b. Cauterizing veins
 - c. Gauging
 - d. Disbudding**
- 280) What field vegetable can be a cheap replacement for soybean meal and corn grain?
- a. Sugar beets
 - b. Sweet corn
 - c. Field peas**
 - d. Almonds
- 281) How many years does it take for a dairy farm to fully transition to become certified organic?
- a. 1
 - b. 3**
 - c. 5
 - d. 7
- 282) What is the largest cost on most U.S. dairy farms?
- a. Feed**
 - b. Fuel
 - c. Labor
 - d. Veterinary fees

- 283) In cows, salmonellosis infections are most common in those that have calved within
- a. 2 days
 - b. 10 days**
 - c. 20 days
 - d. 50 days
- 284) The Standard of Identity for ice cream requires that it contain a minimum of _____ percent milk fat
- a. 10**
 - b. 12
 - c. 14
 - d. 16
- 285) Which of the following is an example of value-added agriculture?
- a. A farm that markets an "Ozark brand" of cheese**
 - b. Purchasing milk from a local producer
 - c. Using a custom heifer raiser
 - d. Drinking raw milk
- 286) Farm marketing cooperatives have been in existence since the early
- a. 1800's**
 - b. 1900's
 - c. 1700's
 - d. 1920's
- 287) Federal Milk Marketing Orders affect prices consumers pay for fresh milk in grocery stores by:
- a. Adjusting them according to demand
 - b. Adjusting them according to supply
 - c. Leaving them to be determined in the marketplace**
 - d. Setting them only once yearly
- 288) What percent of exported U.S. dairy products are sold without a subsidy?
- a. 0 %
 - b. 50 %
 - c. 80 %
 - d. 95 %**
- 289) Dairy farmers receive what percent of the sale of a half-gallon of milk?
- a. 46 %
 - b. 15 %
 - c. 26 %**
 - d. 96 %

- 290) Demand for dairy products is typically the lowest in
- Spring
 - Summer**
 - Fall
 - Winter
- 291) What percent of today's youth consume the recommended amount of dairy products?
- 10%
 - 30%**
 - 50%
 - 75%
- 292) Milk that is used to make butter is classified as which class in Federal Orders?
- Class I
 - Class II
 - Class III
 - Class IV**
- 293) Milk prices on average are the lowest in
- Summer
 - Fall
 - Spring**
 - Winter
- 294) The Federal Orders of today are based on the Agricultural Agreement Act of
- 1927
 - 1947
 - 1937**
 - 1966
- 295) The practice that distributes payments for milk among the producers within a specific Federal Milk Marketing Order is called
- Pool pricing**
 - Classified pricing
 - Support pricing
 - Differential pricing
- 296) What piece of legislation made farmer cooperatives legal?
- Sherman Act
 - Capper-Volstead Act**
 - Farm Bill
 - Barkley Act

- 297) To be labeled made with organic ingredients a dairy product must contain _____ percent or more organic ingredients.
- a. 100
 - b. 90
 - c. 80
 - d. **70**
- 298) The reason that testing of milk is done in laboratories of the USDA Milk Market Orders is:
- a. To assure safety of the supply
 - b. **To provide accurate accounting for amounts of milk solids sold in the order**
 - c. To make sure food and drug law is followed
 - d. To provide data for the US Statistical Reporting Service
- 299) Milk traits, i.e. fat, protein, SNF, and etc., tend to have a heritability of about _____.
- a. Less than 10%
 - b. **20-30%**
 - c. 40-50%
 - d. More than 50%
- 300) Cows treated with BST typically show an increase of _____ in daily milk production.
- a. 2%
 - b. **10%**
 - c. 20%
 - d. 30%