

National FFA Production Exam

2010

1. What type of vegetable is a grazing forage crop in many parts of the world but is not common place in the United States?
 - a) beets
 - b) potatoes
 - c) radish
 - d) turnips
2. Antibiotics are not permitted in milk because
 - a) they do not preserve milk
 - b) they cause off flavors
 - c) fat rises to the surface
 - d) some persons have adverse reactions to certain antibiotics
3. Oxidized flavor in milk is generally caused by
 - a) Growth of bacterial
 - b) Enzymatic breakdown of milk fat
 - c) Pumping of milk
 - d) Exposure to sunlight or fluorescent light
4. The cryoscopic freezing point test is used with milk to determine
 - a) adulteration with water
 - b) titratable acidity
 - c) fat content
 - d) nonfat milk solids content
5. To make on pound of cheese, it takes approximately _____ pounds of whole milk.
 - a) 21.8
 - b) 2.2
 - c) 10.0
 - d) 10.6
6. If one wishes to remove water spots, or milkstone from equipment use
 - a) quaternary ammonium compound
 - b) acid cleaner
 - c) chlorinated alkaline detergent
 - d) iodophor

7. When it comes to fertilizing fields, what three nutrients are known as the “secondary nutrients”?
 - a) calcium, nitrogen, and water
 - b) calcium, sulfur, and magnesium
 - c) nitrogen, phosphorus, potassium
 - d) potassium, phosphorus, and zinc
8. 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
 - a) milk
 - b) lowfat milk
 - c) nonfat milk
 - d) reduced fat milk
9. Stainless steel equipment is used to produce and process milk because
 - a) surfaces can be polished to a smooth finish
 - b) surfaces do not corrode easily
 - c) there is little chance for copper to get into milk
 - d) all of the above
10. Rancidity or lipolyzed flavor in milk results from
 - a) growth of acid producing bacteria
 - b) release of amino acids from casein
 - c) contamination of milk with antibiotics
 - d) action of a natural enzyme of milk that splits fatty acids from milk fat
11. The components of milk responsible for richness and sweetness, in this order, are
 - a) minerals and milk sugar
 - b) milk fat and lactose
 - c) casein and lactic acid
 - d) curds and whey
12. Milk stone on dairy equipment is often caused by
 - a) The use of hard water for cleaning and rinsing
 - b) Failure to use acid-type cleaners on farms that have hard water
 - c) Failure to use adequate detergent on farms that have hard water
 - d) All of the above
13. 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

14. Milk is composed of about 87 percent water and what percent carbohydrates?
- a) 0.5 percent
 - b) 3 percent
 - c) 5 percent
 - d) 30 percent
15. Cracks and blisters of rubber inflations of milking machines
- a) cause milk to sour within a few minutes
 - b) trap milk solids and bacteria
 - c) suggest to the user that the inflations do a poor job of massaging the teats
 - d) both A and B
 - e) both B and C
16. 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
 - e) fat/watery
17. 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
18. 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
19. 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
20. Sour milk contains a high amount of
- a) free fatty acids
 - b) sulfuric acid
 - c) lactic acid
 - d) conjugated linoleic acid

21. The milk flavors than cannot be detected by odor are
- a) high acid and rancid
 - b) feed and garlic/onion
 - c) bitter and salty
 - d) metallic/oxidized and malty
22. What is the largest cost on most U.S. dairy farms?
- a) feed
 - b) fuel
 - c) labor
 - d) veterinary fees
23. Milk that is low in milkfat is likely to have the flavor
- a) salty
 - b) bitter
 - c) unclean
 - d) flat/watery
24. 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
25. 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