

## 2002 - 2003 STATE FFA DAIRY KNOWLEDGE TEST

**Instructions:** Read each question *carefully*. Completely darken the circle of the selected response. Each question is worth four (4) points. The maximum score is 100.

1. A cow's functional type affects her actual performance and longevity. One way to improve functional type over generations is to participate in ...
  - a. a regular linear classification program.
  - b. annual, routine veterinary examinations.
  - c. an extensive record keeping program.
  - d. a regular performance program.
  
2. The terminology, " a stronger median suspensory ligament", would be used to describe a cow's ...
  - a. body capacity.
  - b. udder.
  - c. feet and legs.
  - d. frame.
  
3. A record of an animal's ancestors is called its ...
  - a. progeny.
  - b. classification.
  - c. prototype.
  - d. pedigree.
  
4. In what country did the Holstein breed of cattle originate?
  - a. England
  - b. United States
  - c. Netherlands
  - d. France
  
5. The process of heating and cooling milk to kill harmful bacteria is called ...
  - a. pasteurization.
  - b. sterilization.
  - c. homogenization.
  - d. inoculation.
  
6. Culling is permanently removing cows from the herd. The most common reason for culling is ...
  - a. disease.
  - b. low milk production.
  - c. weak feet and legs.
  - d. udder problems.

2002 - 2003 STATE FFA DAIRY KNOWLEDGE TEST  
PAGE 2

7. The standard length of lactation used for comparing dairy production records is ...
  - a. 283 days.
  - b. 305 days.
  - c. 320 days.
  - d. 353 days.
  
8. It takes about 27 hours of labor per year to take care of one dairy cow and her replacement. One person can provide about 3,000 hours of labor per year. Therefore, one person can take care of a herd of approximately ...
  - a. 130-140 cows.
  - b. 115-125 cows.
  - c. 145-155 cows.
  - d. 100-110 cows.
  
9. A Holstein cow is bred on January 1. When would one expect her to calve?
  - a. September 10.
  - b. October 10.
  - c. November 10.
  - d. December 10.
  
10. When does the average dairy cow come in heat?
  - a. every 21-22 days
  - b. every 17-18 days
  - c. every 12-15 days
  - d. every 25-30 days.
  
11. With proper nutrition, heifers should reach the right size for breeding at about ...
  - a. 8-10 months of age.
  - b. 10-12 months of age.
  - c. 14-15 months of age.
  - d. 18-20 months of age.
  
12. Which breed of dairy cattle is black and white in color and is the largest of the dairy breeds?
  - a. Ayrshire
  - b. Guernsey
  - c. Brown Swiss
  - d. Holstein-Friesian
  
13. What percentage of the total cost of producing milk can be attributed to feed costs?
  - a. 10-20%
  - b. 20-30%
  - c. 30-40%
  - d. 40-50%

2002 - 2003 STATE FFA DAIRY KNOWLEDGE TEST  
PAGE 3

14. The best hay for dairy cattle is ...
  - a. alfalfa.
  - b. red clover.
  - c. sweetclover.
  - d. lespedeza.
  
15. It is recommended that dairy heifers be bred according to ...
  - a. age.
  - b. size.
  - c. strength of legs.
  - d. dairy character.
  
16. After calving, it is critical that the newborn calf receives the first milk secreted from the mother. This milk is called ...
  - a. beta carotene.
  - b. lactose.
  - c. colostrum.
  - d. immunoglobulin.
  
17. A highly palatable feed requiring less labor to harvest and yielding more energy per acre than other forages is ...
  - a. coastal bermuda silage.
  - b. sorghum silage.
  - c. small grain silage.
  - d. corn silage.
  
18. Milk is produced in the udder by ...
  - a. gland cisterns.
  - b. alveoli.
  - c. sphincter muscles.
  - d. teats.
  
19. The estrus or heat period is the time when the female is receptive to the male for breeding. What is the average length of estrus for dairy cows?
  - a. 15-18 hours
  - b. 5-7 hours
  - c. 10-12 hours
  - d. 20-24 hours
  
20. Milk let-down must occur before the milk can be effectively removed from the udder. The most common method of stimulating milk let-down is to ...
  - a. wash the udder with warm water and a sanitizing agent prior to milking.
  - b. play loud music in the milking parlor.
  - c. wash the udder with rubbing alcohol prior to milking.
  - d. strike the udder with the palm of the hand.

2002 - 2003 STATE FFA DAIRY KNOWLEDGE TEST  
PAGE 4

21. Milk fever is caused by a shortage of ...
- iron in the blood.
  - magnesium in the blood.
  - calcium salts in the blood.
  - sugar in the blood.
22. Which grade of milk is used for processing into dairy products such as cheese and butter?
- Grade A
  - Grade B
  - Grade C
  - Grade D
23. Shipping fever is a disease complex that affects the animal's ...
- digestive system.
  - immune system.
  - mammary system.
  - respiratory system.
24. A shortage of energy is usually the most limiting factor in milk production. To insure that enough energy is provided in the feed ration, one should feed a total ration containing ...
- 50-60% total digestible nutrients(TDN).
  - 60-70% total digestible nutrients(TDN).
  - 70-80% total digestible nutrients(TDN).
  - 80-90% total digestible nutrients(TDN).
25. Dairy cattle must be milked at regular intervals. The most common milking interval is ...
- one time per day, 7 days per week.
  - two times per day, 7 days per week.
  - three times per day, 7 times per week.
  - four times per day, 7 times per week.

## 2002 - 2003 STATE FFA DAIRY KNOWLEDGE TEST ANSWER KEY

1. A Linear Classification System, Holstein Assn., page 1
2. B Linear Classification System, Holstein Assn., page 2
3. D Gillespie, page 723
4. C Gillespie, Page 719
5. A
6. B Gillespie, page 780
7. B Gillespie, page 779
8. D Gillespie, page 786
9. B Gillespie, page 787
10. A Gillespie, page 791
11. C Gillespie, page 794
12. D Gillespie, page 719
13. D Gillespie, page 733
14. A Gillespie, page 740
15. B Gillespie, page 794
16. C Gillespie, page 758
17. D Gillespie, page 742
18. B Gillespie, page 801
19. A Gillespie, page 791
20. A Gillespie, page 802
21. C Gillespie, page 829
22. B Gillespie, page 711
23. D Gillespie, page 316
24. B Gillespie, page 752
25. B Gillespie, page 708