

## **2010 National FFA Dairy Cattle Event**

### **Dairy Management Exercise**

Select the best answer for each of the following 50 questions.

**For questions 1 through 15, use the “herd reports” which are attached to the quiz.**

1. Which herd currently has the highest average genetic level for combined fat and protein yield?
2. In which herd will calves born over the next year have the highest estimated genetic merit for fat yield?
3. Which herd shows the least change in genetic producing ability for protein from current cows to that for the daughters expected from current matings?
4. In which herd did the cows have the highest average protein test for the last year?
5. Which herd has the lowest percentage of cows with high somatic cells in the second lactation?
6. Which herd currently has the most successful breeding program in terms of getting first lactation cows pregnant again quickly after calving?
7. Which herd shows the best mammary health within the oldest cows?
8. Which herd has had the most success in getting heifers to calve at an early age?
9. Which herd has the shortest calving interval for the past year?
10. Which herd produced the least energy-corrected milk for all milking cows in the month of September?
11. Which herd appears to have the greatest decrease in size over the past year?
12. In which herd would you expect the highest nutrient demand when balancing a current ration for the milking cows?
13. Which herd has the highest proportion of dry cow days for the current month?
14. Which herd appears to have the greatest range in ages of cows?
15. Which herd has the highest average protein yield on an age corrected basis?

16. Historically, during what season is the demand for milk highest? a) spring, b) summer, c) fall, d) winter, e) it is the same year round.
17. Which breed of dairy cattle has the lowest percentage of inbreeding? a) Ayrshire, b) Brown Swiss, c) Guernsey, d) Holstein, e) Jersey.
18. In the standard protocol for cleaning milking equipment, which of the following is not one of the four phases of cleaning? a) backflushing, b) acid rinse, c) chlorinated alkaline cleaning, d) acid rinse, e) sanitization.
19. Dairy farmers fund the National Dairy Promotion & Research Board and other dairy product promotion through payments of how much per hundredweight of milk shipped? a) \$0.05, b) \$0.10, c) \$0.15, d) \$0.50, e) \$1.00.
20. Feeding proper rations during the summer is important for both cow comfort and maintaining milk production. Which nutrient is most important during the summer months? a) energy, b) fat, c) water, d) vitamins, e) minerals.
21. What percent of lactating dairy cows have oxytocin in their bloodstreams during milking? a) 50%, b) 60%, c) 75%, d) 88%, e) 100%.
22. We can reduce ammonia emissions by reducing the feeding of what? a) fat, b) protein, c) corn silage, d) phosphorus, e) minerals.
23. On the Unified Dairy Cow Score Card, the category "udder" accounts for how many points? a) 10, b) 15, c) 25, d) 30, e) 40.
24. The medical name for tarsal hygroma which is a common ailment of dairy cows is: a) swollen hock, b) dehydration, c) acidosis, d) lameness, e) split toed.
25. This bacteria causes "Circling Disease" in cattle? a) salmonella, b) mycoplasma, c) listeria, d) leukosis, e) haemophilus somnus.
26. Fumonisin and zearalenone are examples of: a) vitamins, b) minerals, c) carbohydrates, d) lipids, e) mycotoxins.
27. Which of the following is a compartment of the dairy cow's stomach? a) duodenum, b) jejunum, c) ileum, d) cecum, e) abomasum.

28. The Dairy Cow Unified Score Card for judging dairy cattle was developed by which organize: a) Holstein Association, b) Purebred Dairy Cattle Association, c) National 4-H Council, d) National FFA Foundation, e) National Dairy Shrine.
29. What describes “days to first service”? a) calving interval, b) number of days from calving until first breeding date, c) days open, d) days dry, e) all of the above.
30. An example of a Class III use for milk would be to make: a) A Class III use does not exist, b) Ice Cream, c) Nonfat dry milk, d) Cottage Cheese, e) Hard Cheese.
31. When using sexed semen, conception rates are about what percent of the conception rates achieved when using unsexed semen under the same conditions? a) 25 %, b) 50 %, c) 80 %, d) 95 %, e) 100%.
32. According to recent USDA surveys, what is the most popular age to wean calves? a) 2 weeks, b) 4 weeks, c) 7 weeks, d) 9 weeks, e) 12 weeks.
33. What allows liquids to bypass the rumen of a young calf and flow directly into the abomasum? a) esophageal groove, b) reticulum, c) Ileum, d) omasum, e) jejunum.
34. What is the name of the part of the cow that is located between the dew claw and the hoof? a) pastern, b) knee, c) toe, d) heel, e) foot angle.
35. In the reproductive tract of a dairy cow, how many uterine horns are there? a) none, b) one, c) two, d) three, e) four.
36. A dairy animal can be disqualified from being shown in the show ring for which of the following reasons: a) blind quarter, b) permanent lameness, c) tampering to conceal faults, d) freemartin heifer, e) all of the above.
37. Fats are broken down in what part of the digestive system? a) rumen, b) omasum, c) large intestine, d) small intestine, e) all of the above.
38. The number one reason for culling in U.S. dairy herds is a) reproductive failure, b) mastitis, c) lameness, d) too old, e) low milk production.
39. Which of the following is not a commonly used estrus synchronization program used in dairy cattle? a) CIDR, b) post-synch, c) heat-synch, d) pre-synch, e) co-synch.

40. In 2008 which state ranked first for milk production per person? a) South Dakota, b) Vermont, c) Wisconsin, d) Idaho, e) New Mexico.
41. In which breed of cows is the incidence of milk fever most common? a) Ayrshire, b) Brown Swiss, c) Guernsey, d) Holstein, e) Jersey.
42. Which sector of dairy products grew an impressive 32 percent between 2004 and 2009, with total sales of \$4.1 billion? a) yogurt and yogurt drinks, b) ice cream and frozen dairy products, c) butter, d) organic milk, e) white milk.
43. Milk over what somatic cell count cannot be legally shipped in the United States? a) 200,000, b) 400,000, c) 500,000, d) 750,000, e) 1,000,000.
44. Each sperm cell contains what sample portion or percentage of the genes in the sire's cells? a)  $\frac{1}{5}$  (20%), b)  $\frac{1}{4}$  (25%), c)  $\frac{1}{2}$  (50%), d)  $\frac{3}{4}$  (75%), e) 100%.
45. The name for milk sugar is? a) Sucrose, b) Fructose, c) Glucose, d) Casein, e) Lactose.
46. Immature hay is a more valuable as a feed for dairy cows than mature hay because of: a) higher nutrient content, b) lower fiber, c) more palatable, d) lower fiber, e) all of the above.
47. This vitamin plays a role in the coagulation of blood. a) Vitamin A, c) Vitamin B12, c) vitamin K, d) vitamin C, e) Vitamin D.
48. Manure digesters convert what gas into electricity? a) propane, b) methane, c) ethanol, d) biodiesel, e) all of the above.
49. Within 30 minutes after milking is completed, milk should be cooled to what temperature? a) 50 degrees F, b) 45 degrees F, c) 38 degrees F, d) 20 degrees F, e) 15 degrees F.
50. What is the common name for infectious keratoconjunctivitis? a) pinkeye, b) ringworm, c) acidosis, d) Johne's, e) ketosis.