

**2008 Junior Dairy Quiz Bowl Questions**

**Round 07**

**Phase B      5 Questions      Correct answers are worth 10 points each.**

**Only the team being asked the questions is to be in the room. Each team will be asked these 5 questions. Answers are to be given by a team captain, but assistance may come from any team member. A question may be repeated only once. Answers must be started within 20 seconds. Partial credit may be given at the discretion of the judges. After one team has been questioned, the other team will enter the contest room and be asked the same 5 questions.**

**1. Which one of the following is the largest dairy milk marketing cooperative in the U.S.?**

- a) Maryland and Virginia Milk Producers
- b) Land O' Lakes
- c) Dairy Farmers of America (DFA)
- d) California Dairies

ANS: c) Dairy Farmers of America (DFA)

**2. Your heifer calf weighs 100 pounds at birth and 500 pounds at 200 days of age. Calculate your heifers' average daily gain (ADG).**

ANS: 2 pounds per day ADG

Calculation: 500 pounds minus 100 pounds birth weight = 400 pounds of gain;  
400 pounds of gain divided by 200 days of age = 2 pounds per day ADG.

**3. Which one of the following is the name of the acid produced during an improper silage fermentation that has an offensive odor and can cause cows to reduce their intake?**

- a) butyric acid
- b) lactic acid
- c) propionic acid

ANS: a) butyric acid

**4. In a dairy cow, which of the following is the name of the opening that the digesta flows through as it enters the omasum?**

- a) jejunum
- b) colon
- c) ileum
- d) reticulo-omasal orifice

ANS: d) reticulo-omasal orifice

**5. The National Agricultural Statistics Service (NASS) conducts monthly surveys to determine dairy cow numbers and milk production. Which of the following branches of the Federal government is NASS a part of?**

- a) U.S. Census Bureau
- b) Food and Drug Administration (FDA)
- c) Internal Revenue Service
- d) U.S. Department of Agriculture (USDA)

ANS: d) U.S. Department of Agriculture (USDA)

Phase C      20 Questions      Correct answers are worth 15 points each.

Both teams are in the room for Phase C. The first contestant to signal will answer the question within 5 seconds after being acknowledged by the moderator. Failure to do so will cost that team 10 points. Any contestant answering a question without being acknowledged by the moderator will lose 10 points. If an answer is incorrect, members of the other team will have the opportunity to answer the question without having it reread except for true/false, either or and yes or no type questions. If an answer is given in these types of questions, the question will be replaced with a tie breaker question, and given to the other team. No points are deducted for giving an incorrect answer. Team members are not allowed to discuss the answers in this phase. No partial credit is available in Phase C, except for bonus questions. If neither team can offer an answer to the question within 10 seconds, the moderator will give the answer and the question will be dropped but neither team will forfeit points.

1. Which of the following is defined as an infection of the uterus?

- a) rumenitis                      b) mastitis                      c) metritis

ANS: c) metritis

2. Which one of the following sections of North Carolina has the fewest number of dairy cows?

- a) Piedmont                      b) Mountains                      c) Coastal Plain

ANS: c) Coastal Plain

3. Which one of the following is not part of the cow's digestive tract?

- a) reticulum                      b) omasum                      c) brisket                      d) abomasum

ANS: c) brisket

4. Which one of the following terms is used to describe the appearance and performance characteristics that an animal shows or demonstrates?

- a) genotype      b) phenotype                      c) mitosis                      d) heterozygote

ANS: b) phenotype

5. Which one of the following best describes the term "alveoli" in the udder of a dairy cow?

- a) a hormone                      c) keratin                      c) clusters of milk secreting cells

ANS: c) clusters of milk secreting cells

**6. Which one of the following is the best time for the newborn calf to receive its first feeding of colostrum?**

- a) after one week of age
- b) at 3 days of age
- c) as soon as possible (preferably within the first 30 minutes of life)

ANS: c) as soon as possible (preferably within the first 30 minutes of life)

**7. In reference to dairy cows, which of the following describes keratin?**

- a) the precursor of Vitamin A
- b) an essential amino acid
- c) a bypass fat feed additive
- d) the wax-like material that lines the teat canal

ANS: d) the wax-like material that lines the teat canal

**8. Which of the following is the amount of checkoff money that dairy producers pay for each cull dairy cow that is sent to market?**

- a) nothing
- b) 15 cents
- c) 50 cents
- d) one dollar

ANS: d) one dollar

**9. Which one of the following do we call the milk that remains in the udder following machine milking?**

- a) lactation
- b) residual milk
- c) alveoli
- d) foremilk

ANS: b) residual milk

**10. Which of the following is the name of the type of bond that joins amino acids together to form protein?**

- a) epoxy bond
- b) elastic bond
- c) peptide bond
- d) glycogen bond

ANS: c) peptide bond

**11. Which one of the following is a source of mycotoxins in feed?**

- a) sugars
- b) bacteria
- c) molds

ANS: c) molds

**12. Which one of the following minerals decreases in the blood when a cow comes down with milk fever?**

- a) selenium            b) zinc            c) calcium

ANS: c) calcium

**13. On the PDCA Dairy Cow Unified Score Card, how many points are assigned to the Dairy Character category?**

- a) 10   b) 15   c) 20   d) 40

ANS: c) 20

**14. On the PDCA Dairy Judging Scorecard, in which category is the withers?**

ANS: Dairy Character

**15. What does PTA stand for in a sire summary?**

ANS: Predicted Transmitting Ability

**16. Who is the current Commissioner of Agriculture in North Carolina?**

ANS: Steve Troxler

**17. In a newborn calf, which stomach compartment is the largest relative size (as a percentage of the total stomach capacity)?**

- a) rumen            b) reticulum            c) omasum            d) abomasum

ANS: d) abomasum

**18. In reference to feeding guidelines for dairy animals, what does NRC stand for?**

ANS: National Research Council

**19. Which one of the following is the name of the cow side test that uses a four-compartment paddle to test a sample of milk to identify cows with mastitis?**

- a) CMT test            b) ELISA test            c) DHI test            d) Johnes test

ANS: a) CMT test

**20. In reference to milk, what do the letters FCM stand for?**

ANS: Fat Corrected Milk

**Bonus Questions**      Each bonus question is worth 20 points.

**Bonus questions may be earned in the toss-up round. To receive a bonus question, 3 different team members must correctly answer the toss-up questions. Bonus questions are not passed to the other team, nor are points deducted for an incomplete or incorrect answer to the question. Bonus question will be asked whenever 3 team members have answered toss-up questions correctly with the count kept individually for both teams within a match. Eligibility for bonus questions does not carry over to another match. The answers must come from the team captain but assistance can come from the other team members. Only the number or answers required by the bonus question will be accepted. Example: If the bonus has a four-part answer - the first four answers given by the team will be accepted. Answers to a bonus question must start within 20 seconds and be completed within 60 seconds.**

**1. Which one of the following has the greatest effect on the concentration of fiber in a growing plant?**

- a) amount of lime applied per acre                      b) stage of maturity of the plant  
c) weed control

ANS: b) stage of maturity of the plant

**2. In reference to the national dairy industry, what does ADSA stand for?**

ANS: American Dairy Science Association

**3. Name the county in North Carolina where the NCDA Piedmont Research Station is located.**

ANS: Rowan County