

**2011 Senior 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 nutrient is found in the nodules on the roots of legumes such as alfalfa?**

ANS: nitrogen

**2. What is the common name of the condition that can develop in the rumen of a dairy cow when we feed too much grain and not enough effective fiber, which causes the pH of the rumen to drop to a low level?**

ANS: acidosis

**3. In drought-stunted corn, where will the largest amounts of nitrate be found?**

ANS: in the stalk (mostly in the bottom of the stalk)

**4. When a calf dies on the farm, veterinarians often conduct a postmortem exam to find out the cause of death. What is another name for this postmortem exam?**

ANS: necropsy

**5. During "High Temperature Short Time" pasteurization (HTST), milk is held at 161 degrees F for how long?**

**a) 60 second      b) 90 seconds      c) 30 seconds      d) 15 seconds**

ANS: d) 15 seconds

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. What disease in calves that affects their muscles can be caused by a shortage of Vitamin E and Selenium?

ANS: White Muscle Disease

2. What is the primary protein in milk?

ANS: casein

3. What waxy substance found in a cow's teat provides a barrier to bacteria?

ANS: Keratin

4. Which one of the following dairy breeds normally has the least amount of calving difficulty?

a) Guernsey      b) Holstein      c) Brown Swiss      d) Jersey

ANS: d) Jersey

5. What is the more scientific name for the disease known as circling disease?

ANS: Listeriosis

6. What hormone is secreted by the corpus luteum?

ANS: progesterone

7. In reference to dairy cows or calves, what is meant by the mortality rate?

ANS: Number of dead animals

**8. In reference to milk quality testing, what does P.I. stand for?**

ANS: Preliminary Incubation

**9. You purchase 100 pounds of 8-12-10 fertilizer. What does the number 10 mean?**

ANS: the fertilizer contains 10 percent potash or potassium

**10. When you “churn” cream, what product does it turn into?**

ANS: Butter

**11. Which one of the following would be the least desirable feed for the week old calf?**

a) calf starter      b) whole milk      c) milk replacer      d) corn silage

ANS: d) corn silage

**12. Hypocalcemia is another name for what metabolic disorder in dairy cows?**

ANS: milk fever

**13. What is the predominant acid in anaerobically fermented corn silage?**

ANS: lactic acid (also accept lactate)

**14. Which one of the following is inorganic and is the preferred bedding for free stalls?**

a) wood shavings      b) “green” sawdust      c) sand      d) straw

ANS: c) sand

**15. What is the name of the virus that causes small blisters on the teats followed by sores and scabs and is spread by the milker?**

a) Staph aureus      b) cow pox      c) mastitis      d) metritis

ANS: b) cow pox

**16. What is the current U.S. legal limit for somatic cells in milk?**

ANS: 750,000 cells/ml

**17. What is the name of the condition that veterinarians call an infected uterus in a dairy cow?**

- a) mastitis    b) gastritis    c) metritis

ANS: c) metritis

**18. What is the name of the “first milk” after calving that contains the antibodies or immunoglobulins that provide the newborn calf with passive immunity to disease?**

ANS: Colostrum

**19. What is the predominant class of immunoglobulins found in bovine colostrum?**

- a) IgA            b) IgG            c) IgM            d) IgF

ANS: b) IgG

**20. Where does fertilization of the ova take place?**

ANS: Oviduct

**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 of the following is not an indication of milk quality?**

- a) sire calving ease    b) standard plate count      c) somatic cell count  
d) preliminary incubation count

ANS: a) sire calving ease

**2. Where is the streak canal located on a cow?**

ANS: in the teat

**3. When formulating rations, nitrogen is a major consideration for dairy nutritionists. Which one of the following is the primary source of nitrogen that is added to the ration?**

- a) limestone            b) fat            c) water            d) crude protein

ANS: d) crude protein