

**2010 Senior Dairy Quiz Bowl Questions**

**Round 03**

**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. What is the term for the fetal membrane, which immediately surrounds the developing calf?**

ANS: Amnion

**2. After peak milk production is attained, the cow's milk production starts to decline. What is the rate of decline or the steepness of the slope of the milk production curve called?**

ANS: persistency

**3. The protein percentage of first milking colostrum is approximately:**

- a) 1/2 that found in normal whole milk
- b) two times that found in normal whole milk
- c) 5 times that found in normal whole milk

ANS: c) 5 times that found in normal whole milk

**4. What is the term that describes when a straw of semen is thawed and then subjected to cool temperatures before reaching the cow?**

ANS: Cold shocked

**5. What is the primary acid formed during the fermentation of milk for the making of cheese?**

- a) acetic
- b) propionic
- c) lactic
- d) butyric

ANS: c) lactic

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. Liquid nitrogen has a temperature of minus 320 degrees F (- 320 degrees F). On the dairy farm, where are we certain to find liquid nitrogen?

- a) in the pulsators    b) in the bulk tank compressor    c) in the semen storage tank

ANS: c) in the semen storage tank

2. When is it most efficient for a dairy cow to regain body condition?

- a) in early lactation                      b) in late lactation                      c) during the dry period  
d) in the first month after calving

ANS: b) in late lactation

3. In a dairy cow, what is the name of the thick-walled fibrous tube that serves as a gateway between the vagina and the uterus?

ANS: cervix

4. 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

5. In genetics, units of inheritance are called:

- a) chromosomes                      b) nucleus                      c) genes                      d) mitochondria

ANS: c) genes

**6. What part of the cow's back lies between the loin and the tail head?**

ANS: Rump

**7. 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

**8. What is the common name for parturient paresis?**

**a) brucellosis            b) milk fever            c) LDA**

ANS: b) milk fever

**9. What component of milk is estimated by the milk cryoscope test?**

ANS: water

**10. Which of the following is the main advantage to using a "Brown Midrib" variety for corn silage?**

**a) higher silage yields            b) higher lignin content            c) lower lignin content and greater fiber digestibility**

ANS: c) lower lignin content and greater fiber digestibility

**11. The most economical method of cooling cows is:**

**a) evaporative cooling  
b) air conditioning  
c) fans**

ANS: evaporative cooling

**12. Grass or alfalfa silages that are ensiled with too much moisture can result in the formation of an undesirable organic acid that has a strong odor. What is the name of this acid?**

ANS: Butyric acid

**13. What is the name of the process where legume plants like alfalfa and clover convert atmospheric nitrogen into nitrogenous compounds that are useful to the plants?**

ANS: Nitrogen fixation

**14. During which of the following age ranges are dairy calves usually weaned?**

- a) 2 to 3 weeks      b) 6 to 8 weeks      c) 10 to 12 weeks      d) 18 to 20 weeks

ANS: b) 6 to 8 weeks

**15. Which of the following is the name of the iron-binding protein found in milk that has anti-microbial activity.**

- a) selenium      b) lactoferrin      c) IgG      d) alkaline phosphatase

ANS: lactoferrin

**16. What is the name of the major respiratory disease in calves?**

ANS: pneumonia

**17. In dairy cattle judging, which of the following is not part of the topline?**

- a) loin      b) chine      c) thurl

ANS: c) thurl

**18. The quality of a forage is generally most affected by:**

- a) variety      b) method of harvesting      c) stage of maturity at harvest  
d) method of storage

ANS: c) stage of maturity at harvest

**19. Which of the following is not a legume:**

- a) soybeans      b) lespedeza      c) red clover      d) triticale

ANS: d) triticale

**20. Which of the following is not a primary organism associated with mastitis:**

- a) Staphylococcus aureus      b) Streptococcus agalactia      c) Streptococcus uberous  
d) Brucella abortus

ANS: d) Brucella abortus

**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. Corn distiller's grains is high in this amino acid that is essential for milk production:**

- a) lysine      b) tryptophan      c) arginine      d) methionine**

ANS: d) methionine

**2. When comparing fertility in dairy animals, which of the following are usually the least fertile?**

- a) heifers      b) second lactation cows      c) third lactation cows      d) aged cows**

ANS: d) aged cows

**3. When a cow is superovulated and the resulting developing embryos are transferred to unrelated recipient cows, the calves that are born will be:**

- a) identical      b) unrelated      c) full siblings**

ANS: c) full siblings