

**2012 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. What category on the new PDCA Dairy Cow Unified Scorecard replaced body capacity and dairy character?**

ANS: Dairy Strength

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

ANS: Amnion

**3. 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

**4. What is the most common nutrient required in the largest amount by dairy cows?**

ANS: Water

**5. Acid-detergent fiber (ADF) in triticale increases as the plant matures. However, what happens to the neutral-detergent fiber (NDF) content of triticale as it matures in the field?**

ANS: NDF content increases

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 brings about an immune response by a specific antibody?

ANS: a) antigen

2. What are the genes called that occupy corresponding loci in homologous chromosomes but affect the same character in different ways?

ANS: alleles

3. What hormone is critical for the initiation and maintenance of lactation?

ANS: Prolactin

4. At what age are dairy calves usually weaned?

ANS: 6 to 8 weeks (accept 6,7 or 8 weeks)

5. What compartment of the ruminant stomach has a mucus lining to protect the surface from hydrochloric acid (HCL)?

ANS: abomasum

6. What toxic pigment can be found in whole cottonseed?

ANS: gossypol

7. What does CLA stand for in reference to milk composition?

ANS: Conjugated Linoleic Acid

**8. What does gestation refer to?**

ANS: the time period when the cow is pregnant

**9. In the dairy cow, what volatile fatty acid is the precursor for glucose?**

ANS: Propionate

**10. In reference to dairy cattle genetics, what term describes the accuracy of a genetic valuation?**

ANS: Reliability

**11. From egg to adult, how many days are in the fly life cycle?**

ANS: 10 days

**12. What hormone causes milk letdown?**

ANS: oxytocin

**13. When cheese is made, what liquid food byproduct is left over?**

ANS: whey

**14. In dairy cattle judging, what major category on the PDCA Scorecard includes the back?**

ANS: Frame

**15. What do we call a heifer that is too fat?**

ANS: overconditioned

**16. During the digestive process, what enzyme functions to break down fat (or lipids)?**

ANS: lipase

**17. How many pounds does a bushel of shelled corn weigh?**

ANS: 56 lbs

**18. What causes ringworm in calves:**

ANS: fungus

**19. How many pairs of chromosomes do dairy cattle have?**

ANS: 30

**20. How many amino acids are considered to be essential in the dairy cow and are therefore required in the diet?**

ANS: 10

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

**a) variety      b) stage of maturity at harvest      c) method of storage**

ANS: b) stage of maturity at harvest

**2. A Holstein cow that scores 88 when classified would be categorized as:**

ANS: Very Good

**3. 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