

**2008 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. 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

**2. When do we normally start feeding dairy cows a “transition diet”?**

- a) 2 months after calving      b) in late lactation just before drying off the cow  
c) 2 to 3 weeks before the expected calving date

ANS: c) 2 to 3 weeks before the expected calving date

**3. Which one of the following is often responsible for a low milk fat test in your herd?**

- a) feeding too much protein                      b) low “effective fiber” level in the ration  
c) feeding cottonseed hulls                      d) feeding hay

ANS: b) low “effective fiber” level in the ration

**4. Which of the following is the term for the amount of heat required to raise the temperature of one gram of water from 14.5 degrees C to 15.5 degrees C?**

- a) TDN                      b) NE                      c) calorie                      d) heat increment

ANS: c) calorie

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

ANS: 2.0 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 = 2.0 pounds per day ADG

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 is the name of the toxic substance that can be formed in sorghum forage that has been damaged by frost?

ANS: Prussic acid

2. SPC stands for Standard Plate Count. What does this measure in milk?

ANS: Bacteria count

3. Name the three basic elements contained in carbohydrates.

ANS: Carbon, Hydrogen and Oxygen

4. What is the name of the mycotoxin, sometimes found in corn, that is of concern because it is carcinogenic and has the possibility of contaminating the human food supply?

ANS: Aflatoxin

5. What is formed when glucose and galactose combine?

ANS: Lactose

6. In the process of artificial insemination (A.I.) on a dairy cow, which one of the following sections of the reproductive tract does the inseminating rod pass through before the semen is deposited?

a) fallopian tubes      b) oviduct      c) uterine body      d) cervix

ANS: d) cervix

**7. What is rennet?**

ANS: The name of the enzyme that is added to milk to make cheese

**8. What is the name of the Federal Milk Marketing Order that includes North Carolina?**

ANS: Appalachian

**9. In a high producing dairy cow, what happens to her body weight when she enters a positive energy balance phase?**

ANS: It increases

**10. Legume forage crops such as alfalfa and clover can convert atmospheric nitrogen into nitrogenous compounds that are useful to the plants. What is the name of this process?**

ANS: Nitrogen fixation

**11. What is the name of the cells that surround the alveolus and contract during milking?**

ANS: Myoepithelial cells

**12. In the dairy cow's reproductive tract, where does fertilization of the ova take place?**

ANS: Oviduct

**13. Which one of the following is classified as a water-soluble vitamin?**

a) Vitamin A      b) Vitamin D      c) Niacin      d) Vitamin E

ANS: c) Niacin

**14. In a newborn calf, in which part of the digestive system are the immunoglobulins in colostrum absorbed into the bloodstream?**

ANS: Small intestine

**15. In reference to calves, which one of the following refers to scours?**

a) acetonemia      b) pneumonia      c) brucellosis      d) enteritis

ANS: d) enteritis

**16. What is the name of the term for a farm's unique identification number that is part of the National Animal Identification System?**

ANS: Premises ID

**17. What is the primary function of the "honeycomb" lining of the reticulum?**

ANS: It serves to trap foreign objects that are eaten such as wire or nails (which helps to prevent hardware disease).

**18. What is another name for the metabolic disorder acetonemia?**

ANS: Ketosis

**19. What is the reason that we apply tail paint and Kamar devices on certain dairy cows?**

ANS: Heat detection - To help detect heat (estrus)

**20. What disease in dairy cattle does BLV stand for?**

ANS: Bovine Leukosis Virus

**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. Approximately how much water does normal whole milk contain?**

- a) 67.5%      b) 77.5%      c) 87.5%      d) 97.5%

ANS: c) 87.5%

**2. When referring to genetic evaluations, what do the letters BLUP stand for?**

ANS: BEST LINEAR UNBIASED PREDICTION

**3. Which one of the following countries has reported the most cases of BSE since 2003?**

- a) Canada      b) United Kingdom      c) Japan      d) United States

ANS: b) United Kingdom