

2008 Senior Dairy Quiz Bowl Questions

Round 05

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 certain situations, dairy cattle nutritionists may recommend feeding a certain type of a DCAD (Dietary Cation-Anion Difference) diet for close-up dry cows. Would the nutritionist recommend feeding an anionic or a cationic diet to help prevent milk fever?

ANS: Anionic diet

2. A farmer receives a blend price of \$20 per hundredweight for raw milk that contains 3.5% butterfat. The butterfat differential is 20 cents per point. Calculate the new blend price if the butterfat content of the raw milk increases to 4.0%?

ANS: \$21 per hundredweight Calculation: 4.0% minus 3.5% = 0.5% or 5 butterfat differential points. 5 butterfat differential points time 20 cents per point = \$1.00. \$20.00 plus \$1.00 = \$21.00 per hundredweight new blend price.

3. Presynch helps synchronize cows before starting them on the Ovsynch program. Cows are given 2 injections of a product during the presync phase. Which one of the following is that product?

- a) BST b) GnRH c) Prostaglandin d) Vitamin B12

ANS: c) Prostaglandin

4. Which one of the following describes the primary function of the omasum?

- a) it traps nails or other sharp objects b) it functions to squeeze fluid out of the digesta
c) it provides a large surface area for nutrient absorption
d) it functions as a large fermentation vat

ANS: b) it functions to squeeze fluid out of the digesta

5. It is least efficient for a dairy cow to regain body condition during this stage of the lactation cycle:

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

ANS: a) dry period

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 foundation that provides the majority of the funding support for the North Carolina Dairy Youth Program?

ANS: North Carolina Dairy Youth Foundation

2. In reference to milk quality testing, what do the initials P.I. stand for?

ANS: Preliminary Incubation

3. How many points are allotted for body capacity on the PDCA Dairy Cow Unified Score Card?

ANS: 10

4. The recommended priority for use of sexed semen is highest in which one of the following groups of dairy cattle?

a) older cows b) heifers c) all cows, regardless of age, that are in standing heat

ANS: b) heifers

5. When referring to pasteurization of calf milk, what does the acronym HTST stand for?

ANS: High Temperature Short Time

6. What is the number of amino acids that are considered to be essential in the dairy cow, and therefore are required in the diet?

ANS: 10

7. In the ruminant digestive system, what is the name of the first section of the small intestine that is connected to the abomasum?

ANS: Duodenum

8. Which one of the following is a class of immunoglobulins (or antibodies) ?

a) FSH b) IgG c) CLA

ANS: b) IgG

9. Which of the following is the primary reason that colostrum from older cows is normally higher in antibodies?

**a) older cows produce more milk b) older cows have given birth to more calves
c) older cows have had more exposure to disease and more development of antibodies**

ANS: c) older cows have had more exposure to disease and more development of antibodies

10. What is the term used to describe an animal that is born without horns?

ANS: Polled

11. In the reproductive system of a dairy cow, which organ produces estrogen?

ANS: Ovary

12. What are the two most limiting amino acids for milk production?

ANS: Methionine and lysine

13. What term refers to practices that prevent the introduction or spread of disease on the farm?

ANS : Biosecurity

14. What is the name of the small endocrine gland that produces follicle stimulating hormone (FSH)?

ANS: Anterior Pituitary Gland (accept pituitary gland)

15. Of the following, which is the most important reason that we need to limit the time that a cow spends crowded in the holding area or pen on her way into the milking parlor?

a) to reduce foot rot b) to reduce heat stress c) to reduce metritis

ANS: b) to reduce heat stress

16. The milk replacer label lists that it contains 20% fat. Calculate the pounds of fat contained in a 50 pound bag of the milk powder?

ANS: 10 pounds of fat

17. A deficiency of this mineral has been associated with retained placenta in cows and white muscle disease in calves. What is the name of this mineral?

ANS: Selenium

18. What vitamin is important to help stop bleeding?

ANS: Vitamin K

19. Name an ionophore that is usually added to dairy heifer diets to improve feed efficiency and control coccidiosis.

ANS: Rumensin (monensin) or Bovatec (lasalocid)

20. What happens to the pH of the rumen when a cow has acidosis?

ANS: The pH decreases

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. When raising dairy heifers, which of the following stages of growth is the most costly period?

- a) 100 to 200 pounds
- b) 300 to 400 pounds
- c) 700 to 800 pounds
- d) 1,200 to 1,300 pounds

ANS: a) 100 to 200 pounds

2. Which one of the following is the minimum amount of silage that should be removed from the exposed surface of a trench silo each day to prevent spoilage?

- a) 2 inches
- b) 6 inches
- c) 24 inches
- d) 36 inches

ANS: b) 6 inches

3. Research has shown that which of the following dry period lengths will maximize milk production in the following lactation?

- a) 30 days
- b) 40 days
- c) 60 days
- d) 90 days

ANS: c) 60 days