

2016 Senior Dairy Quiz Bowl Questions

Round 04

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. A deficiency of Vitamin E in the cow's diet can cause an off-flavor in milk. What is this off-flavor?

- a) rancid b) oxidized c) salty

ANS: b) oxidized

2. Anionic salts are often fed to prevent milk fever in dairy cows. Which of the following is the best time to feed them?

- a) during the 3 weeks after calving b) during the 2 weeks before calving
c) at the beginning of the dry period

ANS: b) during the 2 weeks before calving

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

ANS: Butyric acid

4. What type of inheritance is it when genetic material is transmitted through the cytoplasm instead of the nucleus?

ANS: cytoplasmic inheritance

5. What is the more common name for erythrocytes?

ANS: red blood cells

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. Which of the following dairy cattle are usually the most fertile?

- a) aged cows b) second lactation cows c) heifers

ANS: c) heifers

2. What "inorganic" bedding is the best to use in free stalls?

ANS: Sand

3. The family tree or record of ancestry of a dairy animal is called what?

ANS: pedigree

4. Which one of the following diseases is caused by clostridium bacteria?

- a) blackleg b) ketosis c) fatty liver d) nitrate poisoning

ANS: a) blackleg

5. A dairy cow has a four compartment stomach that includes the "rumen". What do we call an animal with this type of digestive system?

ANS: Ruminant

6. 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

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

ANS: lactic acid (also accept lactate)

8. What is the common term for what can develop in the rumen of a dairy cow when we feed too much grain and not enough effective fiber?

ANS: acidosis

9. Which of the following is the name of the reproductive structure through which the calf fetus receives all of its nutrients?

a) cervix b) placenta c) alveoli d) ovum

ANS: b) placenta

10. What do we call the milk that remains in the udder following the milking process?

ANS: Residual milk

11. What metabolic disease is indicated when the cow goes off feed and there is a noted smell of acetone on her breath?

ANS: Ketosis

12. What muscle keeps the teat end closed and helps prevent organisms from entering the udder?

ANS: Sphincter muscle

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

ANS: Conjugated Linoleic Acid

14. What is the process where chlorophyll-containing plants convert carbon dioxide and other elements into carbohydrates and oxygen?

ANS: Photosynthesis

15. Which of the following is the main reason that dairy cattle nutritionists get concerned about the amount of lignin in forages?

a) cellulose b) hemicellulose c) lignin is not digestible by the dairy cow
d) vitamin A status

ANS: c) lignin is not digestible by the dairy cow

16. What hormone is released by the pineal gland in response to longer day length?

ANS: Melatonin

17. Beta-carotene is the precursor for this vitamin:

ANS: Vitamin A

18. In North Carolina, what generally happens to dairy cow conception rates in the summer?

ANS: They decrease

19. Neutral Detergent Fiber (NDF) contains these three components: cellulose, hemicellulose and _____? What is the third component?

ANS: lignin

20. Where are subcutaneous injections given?

ANS: under the skin

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. Abomasal displacement most often occurs to which side of the animal?

ANS: Left

2. An oxidized flavor in milk is caused by a deficiency of which vitamin in the lactating cow's diet?

ANS: Vitamin E

3. What percentage of their mature weight should first calf heifers weigh?

a) 55%

b) 65%

c) 75%

d) 85%

ANS: d) 85%