

2013 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 is the proper term for the “white blood cells” that are important in immune response?

ANS: Leukocytes

2. Write this down. A cow is consuming 100 pounds of actual (as-fed) pounds of a total mixed ration (TMR) each day. This TMR contains 60% dry matter. How many pounds of dry matter is the cow consuming per day?

ANS: 60 pounds of dry matter

3. Which one of the following organisms is responsible for a contagious form of mastitis?

- a) *Streptococcus uberus* b) *Klebsiella pneumoniae* c) *Staphylococcus aureus*
d) *Escherichia coli*

ANS: c) *Staphylococcus aureus*

4. What substance protects the lining of the abomasums from the hydrochloric acid (HCL) present?

ANS: Mucus

5. What two simple sugars combine to form lactose?

ANS: glucose and galactose

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. In what city and state does the annual North American 4-H Dairy Quiz Bowl Contest take place?

ANS: Louisville, Kentucky

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

a) loin b) crops c) chine

ANS: b) crops

3. If a herd's conception rate is 50%, what percentage of the cows should be pregnant after two services?

a) 25% b) 50% c) 75% d) 80%

ANS: c) 75%

4. What does the lining of the reticulum look like?

ANS: a honeycomb

5. Why is Poloxalene often added to rations when cows are grazing alfalfa or clover?

ANS: to prevent bloat

6. Who invented the continuous cream separator in 1878?

- a) Dr. Westphalia b) Dr. Babcock c) Dr. DeLaval d) Dr. Pasteur

ANS: c) Dr. DeLaval

7. Which dairy breed normally has the least amount of calving difficulty?

ANS: Jersey

8. What is the proper term for "red blood cells"?

ANS: erythrocytes

9. What is the term for a protein that acts as a catalyst in starting or speeding up certain chemical reactions during nutrient metabolism?

ANS: enzyme

10. What enzyme is required to digest lactose?

ANS: Lactase

11. In vertebrate animals, which organ of the body makes cholesterol?

ANS: Liver

12. 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

13. In what city and state is the National Dairy Shrine located?

ANS: Fort Atkinson, Wisconsin

14. To prevent spoilage, what is the minimum amount of silage (in inches) that needs to be removed from the silo face each day?

ANS: 6 inches

15. When should cows that have been treated with antibiotics be milked?

ANS: last, after all healthy cows have been milked

16. Which of the following is a C4 or warm season grass?

a) fescue b) alfalfa c) bermuda d) orchardgrass

ANS: c) Bermuda

17. Which one of the following is the best feed for the week old dairy calf?

a) corn silage b) distillers grain c) whole cottonseed d) whole milk or milk replacer

ANS: d) whole milk or milk replacer

18. What is the term for the process where in the presence of light, chlorophyll-containing plants convert carbon dioxide and other elements into carbohydrates and oxygen?

ANS: Photosynthesis

19. A sample of corn silage tests 33% dry matter. What percentage water does the silage contain?

ANS: 67%

20. What is the human version of Brucellosis called?

ANS: Undulant fever

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. What is released into the bloodstream when a dairy cow is frightened?

ANS: adrenaline

2. What can happen to a dairy cow's feet if we do not feed enough "effective fiber" in the ration and she becomes acidotic?

ANS: she can develop laminitis or founder

3. Which one of the following is found in the greatest amount in corn grain?

a) starch b) fat c) fiber d) protein

ANS: a) starch