

2008 Senior Dairy Quiz Bowl Questions

Round 06

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. Which one of the following best describes the lining of the rumen?

- a) honeycomb b) covered with papillae for nutrient absorption
c) a mucous covered lining to protect it from the hydrochloric acid that is secreted**

ANS: b) covered with papillae for nutrient absorption

2. You notice that the milk somatic cell counts in your herd are increasing. What infection does this normally indicate?

- a) Fatty Liver b) BVD c) Mastitis d) Displaced Abomasum**

ANS: c) Mastitis

3. Which one of the following is “ a substance that, when introduced into the body, brings about an immune response by a specific antibody”?

- a) antioxidant b) antigen c) immunoglobulin**

ANS: b) antigen

4. Which of the following is the name of the part of a cow’s back that lies between the chine and the rump?

- a) loin b) thurl c) poll**

ANS: a) loin

5. Which of the following is the term for a large and complex protein material that is capable of causing disease and that reproduces only inside a host cell?

- a) Bacteria b) Protozoa c) Virus d) Salmonella**

ANS: c) Virus

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 the metabolism process, what is the term for a protein that acts as a catalyst in starting or speeding up certain chemical reactions?

ANS: enzyme

2. Which one of the following is an essential fatty acid?

a) Methionine b) Lysine c) Linoleic d) Proline

ANS: c) Linoleic

3. In reference to dairy and livestock farms what does CAFO stand for?

ANS: Concentrated Animal Feeding Operations

4. What is the name of the hormone used in reproductive management that functions to destroy or regress the corpus luteum?

ANS: Prostaglandin (or Prostaglandin F2 Alpha)

5. How many kilocalories of energy are provided by one gram of fat?

ANS: 9 kilocalories

6. In reference to dairy cattle reproduction, what is the name of the blister-like structure on the ovary that contains the egg before ovulation?

ANS: Follicle

7. What is the name of the most desirable acid produced during corn silage fermentation that functions to preserve the silage when the silage is stored in a silo?

ANS: Lactic acid

8. What is the common name for the metabolic disorder "parturient paresis"?

ANS: Milk fever (or hypocalcemia)

9. What is present in colostrum that provides the newborn calf with passive immunity to disease?

ANS: Immunoglobulins (or antibodies)

10. How many pounds of cheese can be made from 100 pounds of whole milk?

ANS: 10

11. When evaluating the ability of a ration to maintain good rumen function, what does "chewing time in minutes per pound of feed" measure?

ANS: "Effective" fiber

12. What normally happens to the milk fat percentage when lactating dairy cows are not fed enough "effective fiber"?

ANS: It decreases

13. In the last few years, which one of the following sections of the U.S. has seen the greatest percentage decline in numbers of dairy farms?

a) Northeast b) Southeast c) Southwest d) West

ANS: b) Southeast

14. What is the name of the acute infection caused by the spore-forming bacteria, *Bacillus anthracis*, that primarily affects livestock?

ANS: Anthrax

15. What is the name of the major by-product that results from the cheese manufacturing process?

ANS: Whey

16. What is the scientific term for an infection of the uterus?

ANS: Metritis

17. What is the term for the disease brucellosis when it affects humans?

ANS: undulant fever

18. When comparing bulls for artificial insemination, what does "ERCR" stand for?

ANS: Estimated Relative Conception Rate

19. When referring to milk composition analysis, what does MUN stand for?

ANS: Milk Urea Nitrogen

20. On a milking machine, if the milk to rest pulsation ratio is set at 60:40, what percent of the time is the inflation open?

ANS: 60%

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. At first calving, what percentage of mature weight should first calf heifers weigh?

a) 95% b) 85% c) 75% d) 65%

ANS: b) 85%

2. Which of the following states has the most dairy farms?

a) Virginia b) Wisconsin c) Florida

ANS: b) Wisconsin

3. A dairy cow is producing 100 pounds of milk per day that contains 3.5% fat. How many pounds of fat is she producing daily?

ANS: 3.5 pounds