

2012 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. Write this down: Calculate your heifer's average daily gain (ADG) if she weighs 90 pounds at birth and 450 pounds at 200 days of age.

ANS: 1.8 pounds per day ADG

Calculation: 450 pounds minus 90 pounds birth weight = 360 pounds of gain; 360 pounds of gain divided by 200 days of age = 1.8 pounds ADG

3. What is the main reason (disease) that proteins derived from ruminant sources cannot be used in cow rations?

ANS: Mad Cow Disease (also accept Bovine Spongiform Encephalopathy or BSE)

4. What is another name for a direct-fed microbial?

ANS: probiotic

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. If the pH of the rumen fluid is less than 5.5, what is the cow suffering from?

ANS: acidosis

2. What dairy breed is afflicted with genetic disorders of BLADS, mulefoot and DUMPS?

ANS: Holsteins

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

ANS: pedigree

4. What is the main male hormone for reproduction?

ANS: testosterone

5. What is the more common name for bovine keratoconjunctivitis?

ANS: Pinkeye

6. What group of hormones, produced in the uterus, causes regression of the corpus luteum, and contractions of the uterus?

ANS: Prostaglandins

7. Which one of the following is the predominant class of immunoglobulins found in bovine colostrum?

a) IgA b) IgG c) IgM d) IgF

ANS: b) IgG

8. What is the term used to describe the physical characteristics and performance of an individual?

ANS: Phenotype

9. What is the measure of how well calves turn feed into body weight gain?

ANS: Feed efficiency

10. Which volatile fatty acid (VFA) is the major precursor of milk fat?

ANS: Acetic acid (acetate)

11. What is the substance secreted during chewing that helps to buffer the rumen?

ANS: Saliva

12. What is the name of the part of the bulk milk tank that stirs the milk to facilitate cooling and to provide a uniform mixture for sampling?

ANS: The agitator

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

ANS: Photosynthesis

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

ANS: Sphincter muscle

15. What metabolic disorder is caused by a deficiency of magnesium in cows grazing lush pasture?

ANS: grass tetany (also accept grass staggers)

16. In a newborn calf, which stomach compartment has the largest percentage of the total stomach capacity?

ANS: Abomasum

17. The duodenum, ileum and jejunum are parts of what?

ANS: The small intestine

18. When a sperm cell with a Y chromosome fertilizes an egg, what will be the sex of the offspring?

ANS: male

19. What does the Delvo Test or Penzyme Test detect in milk?

ANS: antibiotics

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. What does it mean when a cow is in her first trimester?

ANS: first 3 months of pregnancy

3. A technique where sperm fertilizes the ovum in a laboratory dish, grows into a young embryo in the lab and is then transferred to a cow is called what?

ANS: in vitro fertilization