

2007 Senior Dairy Quiz Bowl Questions

Round 01

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 is the largest dairy milk marketing cooperative in the U.S.?

- a) Maryland and Virginia Milk Producers
- b) Land O' Lakes
- c) Dairy Farmers of America (DFA)
- d) California Dairies

ANS: c) Dairy Farmers of America (DFA)

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. Presynch helps synchronize cows before starting them on the Ovsynch program. Two injections of which one of the following are given during the Presynch phase?

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

ANS: c) Prostaglandin

4. You take a sample of milk from your bulk tank and test it using the Delvotest or the Penzyme test. Which one of the following are you testing the milk for?

- a) milk fat percentage
- b) milk true protein content
- c) antibiotics
- d) lactose

ANS: c) antibiotics

5. What is the name of the term for a farm's unique identification number that is part of the National Animal Identification System?

ANS: Premises ID

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. To determine the crude protein content of a feed, which one of the following do we multiply by 6.25?

- a) the energy content b) the nitrogen content c) the starch content

ANS: b) the nitrogen content

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

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

ANS: c) Linoleic

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

4. Which of the following is the largest operating expense on most dairy farms?

- a) Fertilizer b) Feed c) Supplies d) Labor

ANS: b) Feed

5. Which one of the following is often responsible for a low milk fat test in your herd?

- a) feeding too much protein
- b) low “effective fiber” level in the ration
- c) feeding cottonseed hulls
- d) feeding hay

ANS: b) low “effective fiber” level in the ration

6. Which one of the following describes the process of homogenization in milk?

- a) clarification
- b) pasteurization
- c) the manufacturing process that distributes the fat evenly throughout milk

ANS: c) the manufacturing process that distributes the fat evenly throughout milk

7. In dairy cows, what is the name of the disease caused by the organisms *Staph. aureus*, *Strep. uberis* and *Klebsiella*?

ANS: Mastitis

8. At what temperature should milk be held in the farm bulk tank?

- a) 58 degrees F
- b) 48 degrees F
- c) 38 degrees F
- d) 28 degrees F

ANS: c) 38 degrees F

9. Immunoglobulins present in colostrum provide the newborn calf with which one of the following?

- a) fat
- b) lactose
- c) carbohydrate
- d) passive immunity to disease

ANS: d) passive immunity to disease

10. 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) 12 inches
- d) 24 inches

ANS: b) 6 inches

11. Which nutritional disease is most often associated with laminitis (founder) in dairy cows?

ANS: acidosis

12. In the dairy cow's reproductive tract, where does fertilization of the ova take place?

ANS: oviduct

13. Which one of the following feeds will increase the level of effective fiber in a dairy cow ration?

a) corn grain b) cottonseed meal c) cottonseed hulls d) hominy

ANS: c) cottonseed hulls

14. What is the name for clusters of milk secreting cells in the udder of a dairy cow?

ANS: Alveoli

15. Which one of the following breeds produces milk with the lowest average percent butterfat?

a) Jersey b) Guernsey c) Holstein d) Ayrshire

ANS: c) Holstein

16. Which one of the following is the definition of metritis?

a) an infection of the udder b) an infection of the uterus c) foot rot

ANS: b) an infection of the uterus

17. A deficiency of which one of the following has been associated with retained placenta in cows and white muscle disease in calves?

a) copper b) selenium c) iron d) niacin

ANS: b) selenium

18. In reference to milk composition, what does CLA stand for:

a) Calcium Lactation Availability b) Conjugated Linoleic Acid
c) Cell Lipoprotein Accretion

ANS: b) Conjugated Linoleic Acid

19. Which one of the following is the reason that we apply tail paint and Kamar devices on certain dairy cows?

- a) to improve dry matter intake b) to help detect heat (estrus)
c) to increase milk production

ANS: b) to help detect heat (estrus)

20. Which of the following occurs when not enough fluids are absorbed from the intestinal tract in a baby calf that has scours?

- a) chelation b) rumination c) dehydration

ANS: c) dehydration

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 substance is used to freeze and store semen for artificial insemination?

ANS: Liquid nitrogen

2. When comparing bulls for artificial insemination, what does “ERCR” stand for?

ANS: Estimated Relative Conception Rate

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

ANS: 10