

2013 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. What is the term for the diet that we feed to dairy cows 2 to 3 weeks before the expected calving date?

ANS: Transition diet

2. In reference to milk processing, what is the “make allowance”?

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|---|---|
| a) income over feed costs | b) somatic cell counts |
| c) the cost of turning milk into cheese | d) amount of waste milk from treated cows |

ANS: c) the cost of turning milk into cheese

3. The blister-like structure on the ovary that contains the egg before ovulation is called the:

ANS: follicle

4. Tarsal hygroma is the medical name for what common cow ailment?

- a) acidosis b) dehydration c) metritis d) swollen hock

ANS: d) swollen hock

5. What is the term for how well cows convert feed into milk? This is usually expressed as pounds of milk produced per pound of feed consumed.

ANS: feed efficiency

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. What hormone initiates and maintains lactation?

ANS: Prolactin

2. What describes the “number of days from calving until first breeding date”?

ANS: days to first service

3. Prussic Acid is the toxic compound that can be can be formed when sorghum forage is damaged. What causes this damage to the sorghum?

ANS: frost

4. Lactic acid is the primary acid formed during the fermentation of milk for the making of what dairy food product?

ANS: cheese

5. What is the name of the absorptive tissue that lines the small intestine?

ANS: Villi

6. A deficiency of Vitamin E in the cow’s diet can cause an off-flavor to develop in milk. What is the name of this off-flavor?

ANS: Oxidized flavor

7. Which of the following is not a primary organism associated with mastitis:

- a) Staphylococcus aureus b) Streptococcus agalactia c) Streptococcus uberous
d) Brucella abortus

ANS: d) Brucella abortus

8. What is the enzyme that is added to milk to make cheese?

ANS: Rennet

9. Gestation is the name for the time period when the cow is in a certain reproductive status. What is this status?

ANS: the cow is pregnant

10. Regarding a cow's reproductive status, what main thing happens during ovulation?

ANS: the release of an egg from a follicle

11. What is the term for the fetal membrane, which surrounds the developing calf?

ANS: Amnion

12. How many points are allotted for Rear Feet and Legs on the PDCA Dairy Cow Unified Score Card?

ANS: 20

13. How old are most dairy calves when they are weaned?

ANS: 6 to 8 weeks old (or 42 to 56 days old)

14. What is the name of the category on the updated PDCA Dairy Cow Unified Scorecard that replaced body capacity and dairy character?

ANS: Dairy Strength

15. Which of the following is the protein hormone that is associated with ovulation?

- a) cortisol b) adrenaline c) somatotropin d) LH

ANS: d) LH

16. When corn silage ferments properly, what happens to the pH?

ANS: it decreases

17. What condition can develop in the dairy cow's feet if she has rumen acidosis?

ANS: Laminitis (also accept founder)

18. What does the enzyme cellulase break down in the dairy cow's digestive system?

ANS: cellulose

19. Which of the following is a fat soluble vitamin?

a) Vitamin D b) Vitamin B12 c) Niacin d) Vitamin C

ANS: a) Vitamin D

20. Regarding energy metabolism in an early lactation dairy cow, what is the term for when she is losing body weight?

ANS: Negative energy balance

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. Dairy cattle are most comfortable when the environmental temperature is within a certain range. What is this temperature range called for dairy cattle?

a) temperature-humidity index b) thermo-neutral zone c) *in vitro* thermal range

ANS: b) thermo-neutral zone

2. What is the term used to describe a group of dairy producers such as Maryland-Virginia Milk Producers who join together to market their milk?

ANS: a Cooperative

3. What is the technical term for the class of chemicals used to kill internal parasites in cattle?

ANS: Anthelmintics (also accept dewormers)