

2002 Senior Dairy Quiz Bowl Questions

Round 05

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 breed of dairy cattle generally produces milk with the highest protein content?

ANS: Jersey

2. Which age group of cattle on a dairy farm generally has the highest incidence of dystocia?

ANS: Heifers (when giving birth to their first calf)

3. What is the common name for the cattle disease listeriosis, which is most likely caused by consuming deteriorated silage?

ANS: circling disease

4. On average, how many pounds of body weight per day should Holstein heifers gain from birth to 24 months of age?

a) 1.8 to 2.0 b) 1.0 to 1.2 c) 2.5 to 3.0 d) 3 to 4

ANS: a) 1.8 to 2.0

5. Which of the following is the most costly form of mastitis?

a) acute b) chronic c) subclinical d) clinical

ANS: c) subclinical

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. True or False

In dairy cattle, the conception rate generally improves in the summer.

ANS: False

2. Which nutrient do lipases break down?

ANS: Fat (or lipids)

3. Name the stomach compartment in a dairy cow where the lining is covered with papillae that serve to increase the surface area for absorption of nutrients.

ANS: Rumen

4. Fifty (50) pounds of whole milk should yield about how many pounds of cheese?

ANS: 5

5. When judging dairy cows are the hooks (hipbones) wider or narrower than the pin bones?

ANS: Wider

6. What happens to “bypass protein” in the rumen?

- a) it is degraded
- b) it is not degraded and escapes the rumen for absorption at the small intestine
- c) it is hydrolyzed
- d) it becomes soluble

ANS: b) it is not degraded and escapes the rumen for absorption at the small intestine

7. Which volatile fatty acid produced in the rumen of a dairy cow is a precursor for glucose?

- a) acetate
- b) propionate
- c) butyrate

ANS: b) propionate

8. In a dairy cow diet, as the level of fiber increases, what happens to the energy level?

- a) it increases
- b) it decreases
- c) it stays the same

ANS: b) it decreases

9. True or False

By law, whole milk sold in the grocery store must contain at least 5% milk fat.

ANS: False (3.25% milk fat)

10. What is the name of the condition that occurs in a dairy cow when the pH of the rumen is very low.

ANS: Acidosis

11. Nutritionally, a low milk fat test is an indication of a deficiency of:

- a) fiber
- b) protein
- c) energy
- d) corn grain

ANS: a) fiber

12. Which of the following is a B vitamin:

- a) carotene
- b) niacin
- c) tyrosine
- d) threonine

ANS: b) niacin

13. Your veterinarian cultures *Mycobacterium paratuberculosis* from a cow in your herd. What disease does the cow have?

ANS: Johne's disease

14. Which parent determines the sex of a calf?

ANS: The sire

15. Immediately after a calf is born, its navel should be dipped in what solution?

ANS: Tincture of Iodine

16. True or False

Dairy calves do not need to be fed hay until they are weaned.

ANS: True

17. What two amino acids are most often considered to be first limiting or co-limiting for milk protein synthesis?

ANS: Lysine and Methionine

18. True or False

In order to make genetic progress in a trait, the trait must have variation.

ANS: True

19. How many points on the PDCA scorecard are allotted to dairy character?

ANS: 20 Points

20. Gossypol is a chemical compound, found in some feeds, that has been found to be toxic to some livestock when fed in excess. Name a common dairy feed ingredient that may contain gossypol.

ANS: Cottonseed meal and Whole cottonseed

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 lactose?

- a) milk protein b) milk fat c) milk sugar

ANS: c) milk sugar

2. What term describes congestion of the udder due to excessive fluid accumulation?

- a) metritis b) udder edema c) ketosis d) parturition

ANS: b) udder edema

3. Which compartment of the ruminant stomach is also known as “manyplies” and functions to squeeze fluid out of the digesta:

- a) rumen b) reticulum c) omasum d) abomasum

ANS: c) omasum

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

ANS: Whey

5. When a cow is superovulated and the resulting developing embryos are transferred to unrelated recipient cows, the calves that are born will be:

- a) unrelated b) full siblings c) identical

ANS: b) full siblings