

2010 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. Write this down: Calculate the pounds of dry matter in one ton of corn silage that contains 33% dry matter:

ANS: 660 pounds of dry matter

Calculation: 2000 pounds of silage times 33% = 660 pounds

2. What is the more common name for "ruminal tympany"?

ANS: bloat

3. What describes the "number of days from calving until first breeding date"?

- a) calving interval b) days to first service
c) days open d) days dry

ANS: b) days to first service

4. What 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

5. Which one of the following is the term for the diet that we feed to dairy cows 2 to 3 weeks before the expected calving date?

- a) high group diet b) low group diet c) low fiber diet d) transition diet

ANS: d) transition diet

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. How many points are allotted for dairy strength on the new PDCA Dairy Cow Unified Score Card?

ANS: 25

2. Which one of the following describes casein?

- a) the primary fat found in milk b) the primary carbohydrate found in milk
c) the primary protein found in milk**

ANS: c) the primary protein found in milk

3. What is the name of the bacteria that causes "Circling Disease" in cattle?

ANS: Listeria

4. Which one of the following is the most common bacterium that causes chronic mastitis?

- a) E. coli b) Staph. aureus c) Klebsiella d) Strep. Uberis**

ANS: b) Staph. aureus

5. What test did Dr. Babcock develop that was the basis for DHIA testing?

- a) milk protein test b) milk fat (butterfat) test c) cryoscope test d) MUN test**

ANS: b) milk fat (butterfat) test

6. In the dairy cow's reproductive system, which one of the following does the ovary produce?

- a) testosterone b) cortisol c) estrogen d) lactose

ANS: c) estrogen

7. Which one of the following is the main function of the omasum?

- a) trap foreign objects b) produce microbial protein
c) contain the ovary d) squeeze fluid out of the digesta

ANS: d) squeeze fluid out of the digesta

8. Which one of the following describes "Voluntary Waiting Period (abbreviated VWP)?"

- a) the time period just before calving when you are waiting for the calf to be born
b) the time period that the cows are held in the holding pen
c) the time period after pre-dipping the cows before the milking unit is attached
d) the time period after calving when you choose not to breed a cow

ANS: d) the time period after calving when you choose not to breed a cow

9. Propionate, butyrate, and acetate are volatile fatty acids (VFA's) produced in the rumen. What volatile fatty acid is used by the liver to make glucose?

ANS: Propionate

10. What is the name of the virus that causes small blisters on the teats followed by sores and scabs and is spread by the milker?

- a) Staph aureus b) cow pox c) mastitis d) metritis

ANS: b) cow pox

11. Which professional sports league is partnering with the dairy checkoff to promote child nutrition and fitness?

ANS: National Football League (NFL)

12. Which one of the following is the approximate gestation length for a dairy cow?

- a) 21 days b) 343 days c) 150 days d) 283 days

ANS: d) 283 days

13. Which of the following minerals is a cation that contributes to the dietary cation-anion difference?

- a) iodine b) calcium c) potassium d) chlorine

ANS: c) potassium

14. High levels of iron in a dairy cow's diet can decrease the availability of what two elements?

- a) selenium and cobalt b) chlorine and sodium c) copper and zinc

ANS: c) copper and zinc

15. Your veterinarian says that a cow is in the second trimester. What does that mean?

- a) first 3 months of pregnancy b) second 3 months of lactation
c) second 3 months of pregnancy

ANS: c) second 3 months of pregnancy

16. Which of the following describes the duodenum in the ruminant digestive system?

- a) the first section of the reticulum
b) the opening from the rumen to the omasum
c) the first section of the small intestine that is connected to the abomasum

ANS: c) the first section of the small intestine that is connected to the abomasums

17. What milk component content is determined using the milk cryoscope test?

- a) protein b) fat c) water d) carbohydrate

ANS: c) water

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

ANS: acidosis

19. Why is Poloxalene often added to rations when cows are grazing alfalfa or clover?

ANS: to prevent bloat

20. What is the name of the enzyme that breaks down cellulose?

ANS: cellulase

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

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

ANS: d) swollen hock

2. What is the name of the enzyme that is added to milk to make cheese?

ANS: Rennet

3. In the dairy cow, where are B-complex vitamins and Vitamin K produced?

a) kidney b) ovary c) rumen

ANS: c) rumen