

2016 Junior Dairy Quiz Bowl Questions

Round 07

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. Two (2) primary gases are produced in the rumen during the condition known as bloat. One of these gases is carbon dioxide. What is the name of the other primary gas produced?

ANS: Methane

2. Your heifer calf weighs 100 pounds at birth and 500 pounds at 200 days of age. Calculate your heifers' average daily gain (ADG).

ANS: 2 pounds per day ADG

3. Which of the following are good sources of rumen undegradable or "bypass" protein?

- a) corn gluten meal and blood meal b) molasses and alfalfa meal
c) corn silage and cottonseed hulls

ANS: a) corn gluten meal and blood meal

4. In a dairy cow, which of the following is the name of the opening that the digesta flows through as it enters the omasum?

- a) jejunum b) colon c) ileum d) reticulo-omasal orifice

ANS: d) reticulo-omasal orifice

5. The National Agricultural Statistics Service (NASS) conducts monthly surveys to determine dairy cow numbers and milk production. Which of the following branches of the Federal government is NASS a part of?

- a) U.S. Census Bureau b) Food and Drug Administration (FDA)
c) Internal Revenue Service d) U.S. Department of Agriculture (USDA)

ANS: d) U.S. Department of Agriculture (USDA)

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. Class II milk is milk used for:

- a) fluid milk
- b) cottage cheese, ice cream and yogurt
- c) hard cheese and butter

ANS: b) cottage cheese, ice cream and yogurt

2. Which one of the following sections of North Carolina has the fewest number of dairy cows?

- a) Piedmont
- b) Mountains
- c) Coastal Plain

ANS: c) Coastal Plain

3. What is the main reason that a nutritionist would include a "bentonite" additive in a feed ration?

- a) to provide selenium
- b) to bind mycotoxins
- c) to provide energy

ANS: b) to bind mycotoxins

4. Glucose and Galactose combine to make the sugar found in milk. What is the name of this sugar?

ANS: Lactose

5. Which one of the following best describes the term "alveoli" in the udder of a dairy cow?

- a) a hormone
- b) keratin
- c) clusters of milk secreting cells

ANS: c) clusters of milk secreting cells

6. Which ruminant stomach compartment is the largest relative size in a newborn calf?

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

ANS: d) abomasum

7. In reference to a sire summary, what does the abbreviation PTA stand for?

ANS: predicted transmitting ability

8. Which of the following is the amount of checkoff money that dairy producers pay for each cull dairy cow that is sent to market?

- a) nothing b) 15 cents c) 50 cents d) one dollar

ANS: d) one dollar

9. What type of diet is often fed to close-up dry cows to help prevent milk fever?

- a) cationic diet b) anionic diet c) alfalfa hay diet

ANS: b) anionic diet

10. What is the number of days in milk for a standard lactation?

ANS: 305 days

11. Which one of the following minerals decreases in the blood when a cow comes down with milk fever?

- a) selenium b) zinc c) calcium

ANS: c) calcium

12. What is term for when the abomasum twists out of normal position?

ANS: displaced abomasum (also accept DA)

13. In early lactation, a high producing dairy cow will mobilize her body fat stores as a source of _____.

ANS: Energy

14. On the PDCA Dairy Judging Scorecard, in which category is the withers?

ANS: Dairy Character

15. What term is the period when the calf is developing in it's mother's womb?

- a) lactation b) parturition c) gestation

ANS: c) gestation

16. A desirable water temperature for mixing calf milk replacer is approximately:

- a) 100 degrees F b) 40 degrees F c) 150 degrees F

ANS: a) 100 degrees F

17. Who is the current Commissioner of Agriculture in North Carolina?

ANS: Steve Troxler

18. About how many gallons of blood must pass through the udder in order for the cow to produce one gallon of milk?

- a) 10 to 15 gallons b) 40 to 50 gallons c) 400 to 500 gallons

ANS: c) 400 to 500 gallons

19. What is the name of the cheese that is light colored, noted for its firm texture, and known for having holes or air pockets throughout?

ANS: Swiss cheese

20. In reference to milk, what do the letters FCM stand for?

ANS: Fat Corrected Milk

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. For dairy cattle, which nutrient is the cheapest, most important and required in the largest quantity?

ANS: Water

2. In reference to the national dairy industry, what does ADSA stand for?

ANS: American Dairy Science Association

3. True or False:

An embryo with two X chromosomes will result in a bull calf.

ANS: False