

2015 Junior 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. How many pounds of protein are in one ton (2000 pounds) of dairy feed that contains 18% protein?

- a) 200 pounds b) 360 pounds c) 18 pounds d) 218 pounds**

ANS: b) 360 pounds

2. What is the definition of “days open” on a DHIA report?

- a) number of days in lactation b) number of days from calving to conception
c) number of days dry**

ANS: b) number of days from calving to conception

3. 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

4. Your veterinarian says that a cow is in the first trimester. What does that mean?

- a) first 3 months of pregnancy b) first 3 months of lactation
c) the first part of the dry period**

ANS: a) first 3 months of pregnancy

5. When referring to milk composition, what do the initials SNF stand for?

ANS: Solids-Not-Fat

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. On the PDCA Dairy Cow Unified Score Card, how many points are assigned to the Frame category?

- a) 40 b) 20 c) 15 d) 10

ANS: c) 15

2. What document establishes the standards for Grade A milk?

- a) Federal Milk Order b) Pasteurized Milk Ordinance (PMO)
c) PDCA Score Card

ANS: b) Pasteurized Milk Ordinance (PMO)

3. How many fatty acids does a triglyceride molecule contain?

ANS: Three

4. What is the source of mycotoxins in feed?

- a) bacteria b) molds c) carbohydrates

ANS: b) molds

5. Which part of the milking machine functions to alternate vacuum and atmospheric pressure in the space between the teat cup shell and the liner?

- a) regulator b) pulsator c) compressor

ANS: b) pulsator

6. What is the normal delivery position when a calf is born?

- a) back feet first b) shoulders first c) front feet first and then the head**

ANS: c) front feet first and then the head

7. Which of the following is the main reason that the feed additive Decco (decoquinate) is often included in calf starter feed?

- a) to control coccidia b) as a source of calcium c) to control flies**

ANS: a) to control coccidian

8. What is the scientific term for the product Rumensin?

- a) decoquinate b) lasalocid c) monensin d) lactoferrin**

ANS: c) monensin

9. Which one of the following is the name of the acid produced during an improper silage fermentation that has an offensive odor and can cause cows to reduce their intake?

- a) butyric acid b) lactic acid c) propionic acid**

ANS: a) butyric acid

10. In a lactating dairy cow, which of the following is the hormone responsible for a cow not having milk letdown?

- a) adrenaline (or epinephrine) b) oxytocin c) progesterone**

ANS: a) adrenaline (or epinephrine)

11. On the PDCA Dairy Cow Unified Score Card, how many points are allotted to udder?

- a) 10 b) 15 c) 20 d) 40**

ANS: d) 40

12. Which one of the following is the percentage of water contained in normal milk?

- a) 67.5% b) 77.5% c) 87.5% d) 97.5%**

ANS: c) 87.5%

13. What compartment of the ruminant stomach is similar to the human stomach?

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

ANS: a) abomasum

14. In the dairy cow, what is the name of the gland that produces the hormone oxytocin?

ANS: Pituitary gland

15. What is the name for a sterile heifer that is born twin to a bull?

ANS: Freemartin

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

- a) methionine and lysine b) arginine and leucine c) valine and tryptophan

ANS: a) methionine and lysine

17. Which one of the following ranges is closest to the total ration crude protein requirement for early lactation cows?

- a) 6 to 8% b) 10 to 12% c) 16 to 18% d) 25 to 28%

ANS: c) 16 to 18%

18. What is the name of the hormone that is secreted by the corpus luteum (yellow body)?

- a) testosterone b) progesterone c) adrenaline (epinephrine) d) oxytocin

ANS: b) progesterone

19. On a DHIA record, which of the following does days to first service refer to?

- a) the number of days from calving until first breeding date
b) number of days open
c) number of days dry

ANS: a) the number of days from calving until first breeding date

20. What is the name of the blister-like structure on the ovary that contains the egg before ovulation?

- a) cervix b) uterus c) follicle

ANS: c) follicle

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. Which of the following causes Blackleg in cattle?

a) a virus b) a fungus c) a bacterium

ANS: c) a bacterium

2. What has the greatest effect on the concentration of fiber in a growing plant?

a) stage of maturity of the plant b) weed control c) amount of lime applied

ANS: a) stage of maturity of the plant

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

ANS: American Dairy Science Association