

2004 Junior Dairy Quiz Bowl Questions

Round 04

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 name of the laboratory test that measures milk fat or butterfat?

ANS: Babcock Test

2. What does the process of pasteurization do to raw milk?

ANS: Destroys bacteria in the milk

3. Name the city and state where the National Dairy Shrine is located.

ANS: Fort Atkinson, Wisconsin

4. What are alveoli (in the udder of a dairy cow)?

ANS: Clusters of milk secreting cells

5. On a DHIA report, what describes the number of days from calving to conception?

ANS: "days open"

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. Liquid nitrogen is used to freeze and store semen. What is the temperature (in degrees F) of liquid nitrogen?

- a) - 120 degrees F b) - 220 degrees F c) - 320 degrees F d) - 420 degrees F

ANS: c) - 320 degrees F

2. The main reason that soybean meal is fed to dairy cattle is to provide:

- a) minerals b) buffers c) protein d) energy

ANS: c) protein

3. When cheese is made, what feed by-product is recovered?

ANS: Whey

4. How many pounds of cheese can be made from 200 pounds of milk?

- a) 40 b) 30 c) 20 d) 10

ANS: c) 20

5. In the reproductive system of a dairy cow, what is the proper name for the term “yellow body”?

ANS: corpus luteum

6. In a dairy cow, which of the following is the normal range in the length of the estrous cycle?

a) 14 to 16 days b) 18 to 24 days c) 28 to 32 days

ANS: b) 18 to 24 days

7. Why is sodium bicarbonate often included in dairy cow diets?

a) as a buffer b) as a source of protein c) as a source of energy

ANS: a) as a buffer

8. Which of the following is part of the protein component of milk?

a) casein b) lactose c) carbohydrate d) fat

ANS: a) casein

9. What is the name of the ligament that divides the udder into a right and left side, and provides the main support for the udder?

a) median suspensory ligament b) anterior cruciae ligament c) lateral ligament

ANS: a) median suspensory ligament

10. What condition can occur in cows that graze alfalfa or clover?

ANS: Bloat

11. When should the newborn calf receive its first feeding of colostrum?

a) at 3 days of age b) after the first day of life
c) as soon as possible, preferably within the first 30 minutes of life

ANS: c) as soon as possible, preferably within the first 30 minutes of life

12. "Navel-ill" in a calf will often result in swelling and inflammation in what part of the body:

a) joints b) eyes c) head

ANS: a) joints

13. Which of the following is not part of the cow's digestive system?

a) rumen b) small intestine c) cervix d) esophagus

ANS: c) cervix

14. What do the letters FCM stand for?

ANS: Fat Corrected Milk

15. Distillers grains, hominy feed and wheat middlings are examples of:

a) forages b) by-product feeds c) bentonites

ANS: b) by-product feeds

16. Why is one of the following additives: monensin, lasalocid or deoquinatone often included in calf starter feed?

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

ANS: b) to control coccidia

17. What is the minimum protein percentage that a good quality milk replacer should contain?

**a) 20 percent c) 12 percent
b) 14 percent d) 8 percent**

ANS: a) 20 percent

18. What is the name of the hormone that is responsible for milk letdown?

ANS: oxytocin

19. The process of flushing fertilized eggs from donor cows and implanting them in recipient cows is called:

a) gestation b) artificial insemination c) embryo transfer

ANS: c) embryo transfer

20. What dairy breed is traditionally known for producing milk with the highest percentage of milk fat and milk protein?

ANS: Jersey

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 gland produces the hormone oxytocin?

ANS: Pituitary gland

2. What is the name of the contractile tissue that functions to force milk out of the alveoli?

ANS: Myoepithelium (or myoepithelial cells)

3. When comparing bulls for artificial insemination, what does ER CR stand for:

ANS: Estimated Relative Conception Rate