

**2013 Junior Dairy Quiz Bowl Questions**

**Round 08**

**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 section of the reproductive tract does the A.I. inseminating rod pass through immediately before the semen is deposited?**

ANS: cervix

**2. Which of the following is a type of protein found in colostrum that provides passive immunity to the calf?**

**a) somatic cells                      b) immunoglobulins                      c) erythrocytes**

ANS: b) immunoglobulins (also accept antibodies)

**3. A deficiency of what trace mineral has been associated with retained placenta in cows and white muscle disease in calves?**

ANS: selenium

**4. Your cow is sick and the veterinarian treats her with propylene glycol. What is most likely her problem?**

ANS: ketosis

**5. What metabolic disorder often occurs when a dairy cow eats too much grain?**

ANS: Acidosis

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.      What hormone causes milk “let down”?

ANS: oxytocin

2.      What is the term used in dairy cattle judging when a cow is close at the hocks?

ANS: cow-hocked

3. Rumensin and Bovatec increase feed efficiency and body weight gain in heifers. These products are also called:

a) ionophores      b) antibodies      c) energy supplements

ANS: a) ionophores

4. Dry matter intake by lactating Holstein cows generally averages about:

a) 25 to 30 lbs.      b) 45 to 55 lbs.      c) 95 to 100 lbs.

ANS: b) 45 to 55 lbs.

5. The calf develops in what part of a pregnant cow?

a) uterus      b) cervix      c) ovary

ANS: a) uterus

6. What is the name of the hormone that is produced by the pituitary gland and functions to initiate and maintain lactation?

ANS: Prolactin

**7. Where in the animal's body would you find most of the phosphorous reserves?**

ANS: Bone

**8. What liquid element is used to freeze and store semen straws on the dairy farm?**

ANS: Nitrogen

**9. What vitamin prevents the disease "rickets" in calves?**

ANS: Vitamin D

**10. What is the name of the tiny, fingerlike projections that function to absorb nutrients in the small intestine?**

ANS: Villi

**11. The amount of cheese that can be manufactured from milk is most affected by which component of the milk?**

ANS: Protein

**12. What is the name of the gland that secretes FSH (Follicle Stimulating Hormone)?**

ANS: Pituitary gland

**13. What is "dystocia"?**

ANS: Difficulty giving birth

**14. Which breed normally has the lowest incidence of dystocia?**

ANS: Jersey

**15. What is the term for the process in which sperm undergo a change in the female reproductive tract, enabling them to penetrate and fertilize the ovum?**

ANS: Capacitation

**16. How many quarts of colostrum should Holstein calves be fed as soon as possible after birth?**

ANS: 4 quarts

**17. What is the name for the cluster of milk producing cells in the udder?**

ANS: Alveoli

**18. What is the term for an excessive accumulation of fluid in the intracellular space of the udder?**

ANS: Edema

**19. When a cow is frightened, what hormone is immediately released?**

ANS: Adrenaline (also accept epinephrine)

**20. Which body organ converts propionate to glucose in ruminant animals?**

ANS: Liver

**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. The recommended maximum level of fat in a lactating cow's diet is?**

- a) 2-3%                      b) 3-5%                      c) 5-7%                      d) 10-12%.

ANS: c) 5-7%

**2. What is the term for a positively charged ion or particle?**

ANS: cation

**3. What is the primary milk protein?**

ANS: casein