

## **2005 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 do the initials DHIA stand for?**

ANS: Dairy Herd Improvement Association

**2. True or False**

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

ANS: True

**3. What is the average gestation period (in days) for a cow?**

ANS: 280 days (accept 275 to 285 days)

**4. What is the name for clusters of milk secreting cells in the udder of a dairy cow?**

ANS: Alveoli

**5. What is the name of the hormone that maintains pregnancy in dairy cattle?**

ANS: Progesterone

**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 is the maximum legal limit of somatic cells per milliliter that milk can contain?**

**a) 2,000,000 cells/ml c) 500,000 cells/ml**

**b) 1,000,000 cells/ml d) 750,000 cells/ml**

**ANS: d) 750,000 cells/ml**

**2. On a milking machine, what part functions to alternate vacuum and atmospheric pressure in the space between the teat cup shell and the liner?**

**a) bulk tank b) compressor c) pulsator d) milker claw**

ANS: c) pulsator

**3. What are acetate, propionate and butyrate?**

**a) volatile fatty acids produced in the rumen b) amino acids c) somatic cells**

ANS: a) volatile fatty acids produced in the rumen

**4. What is the name of the condition in which a cow is receptive to be bred?**

**a) lactation b) gestation c) dry period d) estrus or heat**

ANS: d) estrus or heat

**5. What is the name of the muscle that keeps the teat end closed and helps prevent organisms from entering the udder?**

ANS: Sphincter muscle

**6. What is the proper name for the condition commonly known as “milk fever”?**

**a) mastitis b) parturient paresis c) displaced abomasum d) laminitis**

ANS: b) **parturient paresis**

**7. What is the name of the substance in the semen tank that is used to freeze straws of semen?**

ANS: Liquid nitrogen

**8. Which of the following stomach compartments receives the milk directly when a calf nurses milk?**

a) rumen b) reticulum c) abomasum

ANS: c) abomasum

**9. In dairy cattle judging, which of the following is the part of the cow you are referring to when you describe the cow as being sickle-hocked?**

a) loin b) rear legs c) front legs d) chine

ANS: b) rear legs

**10. Which of the following is routinely added to dairy cow diets as a buffer?**

**a) selenium b) sodium bicarbonate c) lysine d) salt**

ANS: b) sodium bicarbonate

**11. Which of the six major dairy breeds originated in the United States?**

ANS: None of the major dairy cow breeds originated in the United States

**12. Which of the following is used to form protein:**

**a) lactose b) amino acids c) vitamins**

ANS: b) amino acids

**13. When you measure the heart girth of a dairy animal with a special tape, what are you trying to estimate?**

ANS: Body weight

**14. What is another name for a calf's father?**

**a) dam b) offspring c) sire d) progeny**

ANS: c) sire

**15. Bypass protein refers to the part of feed protein that, in the cow's rumen, is :**

**a) undegraded b) degraded c) fermented to volatile fatty acids**

ANS: a) undegraded

**16. Which of the following is part of the protein component of milk?**

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

ANS: d) casein

**17. What is the common name for the disease caused by the bacteria *Mycobacterium paratuberculosis*?**

**a) Bovine Leukosis Virus (BLV) b) Johne's (pronounced "yo-nees") disease**

**c) mastitis**

ANS: b) Johne's disease

**18. In dairy cattle judging, what are you referring to when you describe this part as having a higher and wider attachment?**

**a) fore udder b) rear udder c) tail head d) muzzle**

ANS: b) rear udder

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

**a) after one week of age b) at 3 days of age**

**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

**20. Which of the following is not part of the cow's reproductive system?**

**a) fallopian tubes b) uterus c) cervix d) omasum**

ANS: d) omasum

**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 is the name of the portion of a cow's back closest to the withers?**

- a) rump c) chine**
- b) brisket d) loin**

ANS: c) chine

**2. Name the four fat-soluble vitamins.**

ANS: A, D, E, K

**3. When referring to a dairy cow diet, what do the letters TMR stand for?**

ANS: Total mixed ration

