

## **2003 Senior 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. On the PDCA Dairy Cow Unified Score Card, how many points are assigned to the Frame category?**

ANS: 15 points

**2. What is the name of the disease in people that is the same as brucellosis in cattle?**

ANS: Undulant fever

**3. Which breed of dairy cattle generally produces milk with the highest protein content?**

ANS: Jersey

**4. What is the name of the sugar found in milk?**

ANS: Lactose

**5. When a sperm cell with a Y chromosome fertilizes an egg, what sex will the offspring be?**

ANS: Male

**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. Immediately after a calf is born, its navel should be dipped in what solution?**

ANS: Tincture of Iodine

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

ANS: Body weight

**3. What is the term for a sterile female born twin to a bull?**

ANS: Freemartin

**4. What is the type of milking parlor where the cows stand on a rotating platform during milking?**

**a) herringbone c) side opening**

**b) parallel d) carousel**

ANS: d) carousel

**5. What condition in cattle is usually caused by grazing lush alfalfa or clover?**

ANS: Bloat

**6. Costs vary significantly as young dairy heifers mature. At what stage of growth is the cost per hundred weight most expensive to raise calves?**

**a) 1,200 to 1,300 pounds c) 300 to 400 pounds**

**b) 700 to 800 pounds d) 100 to 200 pounds**

ANS: d) 100 to 200 pounds

**7. What is the name of the highly contagious cattle disease that caused thousands of dairy cattle to be slaughtered in Great Britain recently?**

ANS: Foot and Mouth Disease (FMD)

**8. Where are the immunoglobulins in colostrum absorbed in a newborn calf?**

ANS: Small intestine

**9. Well-grown Holstein heifers should be bred at what age?**

**a) 9 to 11 months b) 13 to 15 months c) 18 to 20 months d) 22 to 24 months**

ANS: b) 13 to 15 months

**10. What two amino acids are most often considered to be first limiting or co-limiting for milk protein synthesis?**

ANS: Lysine and Methionine

**11. Name the 3 primary volatile fatty acids found in the rumen:**

ANS: Acetic, Propionic, Butyric (also accept acetate, propionate and butyrate)

**12. On a feed ration report you see that the copper concentration is listed as 10 ppm.**

**What does ppm mean?**

ANS: Parts per million

**13. What do the initials ET stand for on a Holstein pedigree?**

ANS: Embryo Transfer

**14. Which parent determines the sex of a calf?**

ANS: The sire

**15. The official placing on a class of cows is 3-1-2-4 with cuts of 2-6-4. Your placing is**

**3-1-4-2. What is your score?**

ANS: 46

**16. What two breeds of dairy cattle originated on islands in the English Channel?**



ANS: Guernsey and Jersey

**17. What hormone is released when a cow is frightened?**

**a) progesterone b) adrenaline (epinephrine) c) testosterone d) estrogen**

ANS: b) adrenaline (epinephrine)

**18. On a milking system, what prevents the vacuum from going too high?**

ANS: Vacuum regulator or controller (accept regulator or controller)

**19. What is the major product of silage fermentation that helps to preserve the silage in the silo?**

**a) amino acids b) oxygen c) lactic acid d) carbon dioxide**

ANS: c) lactic acid

**20. When posing a lactating dairy cow in the show ring, the rear leg closest to the judge should be in what position?**

ANS: Forward

**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. Name the four phases of the estrous cycle.**

ANS: proestrous, estrus, metestrus, diestrus

**2. If a corn silage sample contains 35% dry matter, what percentage moisture does it contain?**

ANS: 65%

**3. What is a zygote?**

ANS: A fertilized egg

**4. What is the name of the toxic substance in frost damaged sorghum?**

ANS: Prussic acid

**5. True or False**

**"Gross energy" is determined by bomb calorimetry and is the total amount of energy that a feed contains.**

ANS: True