

## 2003 Senior Dairy Quiz Bowl Questions Round 06

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 a zygote?

ANS: A fertilized egg

2. What is the name of the toxic substance found in frost damaged sorghum?

ANS: Prussic acid

3. True or False

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

ANS: True

**4. True or False**

**Dairy calves do not need to be fed hay until they are weaned.**

ANS: True

**5. The X and/or Y chromosome in the cells of an embryo determine what characteristic of the new calf to be born?**

ANS: Sex

**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 a Holstein pedigree, what do the letters TPI stand for?**

ANS: Type-Production Index

**2. On a milking machine, if the milk to rest pulsation ratio is set at 60:40, what percent of the time is the inflation closed?**

**a) 30% b) 40% c) 50% d) 60%**

ANS: b) 40%

**3. What do the letters BLUP stand for when talking about genetic evaluations?**

ANS: BEST LINEAR UNBIASED PREDICTION

**4. Which volatile fatty acid produced in the rumen is a precursor for glucose?**

ANS: Propionate

**5. What is the term used to describe the physical characteristics and performance of an individual?**

ANS: Phenotype

**6. When a cow is superovulated and the resulting developing embryos are transferred to unrelated recipient cows, the calves that are born will be:**

**a) unrelated b) full siblings c) identical**

ANS: b) full siblings

**7. If a ration contains 51% moisture, what percentage dry matter does it contain?**

ANS: 49% dry matter

**8. Which hormone is released from the anterior pituitary and stimulates follicular growth?**

ANS: FSH or follicle stimulating hormone

**9. The most important factor that affects the concentration of protein in a forage is:**

**a) weed control b) stage of maturity c) amount of lime applied to the field**

ANS: b) stage of maturity

**10. During fermentation of corn silage in a silo, the pH of the silage:**

**a) increases b) decreases c) remains the same**

ANS: b) decreases

**11. Which mineral is associated with the prevention of goiter?**

ANS: Iodine

**12. Drought-stressed forages, especially following a rain, can be toxic to dairy animals due to high concentrations of:**

**a) protein b) nitrate c) calcium d) phosphorous**

ANS: b) nitrate

**13. If a 1500 pound cow is eating an amount of feed dry matter equivalent to 3% of its body weight, how many pounds of feed dry matter is the cow eating?**

ANS: 45 pounds

**14. What do the letters ppm stand for?**

ANS: Parts per million

**15. You check the label of a milk replacer and it states that it contains 20% fat. How many pounds of fat will be contained in a 50 pound bag of the milk powder?**

ANS: 10 pounds of fat



**16. The condition in which a cow comes into heat every few days is called:**

**a) gestation b) anestrus c) cystic**

ANS: c) cystic

**17. A cow that was successfully bred and conceived on January 10 would be expected to calve in which month?**

**a) October b) November c) December**

ANS: October

**18. Deoxynivalenol (DON) and zearalenone are examples of:**

**a) ionophores b) mycotoxins c) amino acids**

ANS: b) mycotoxins

**19. What do you determine when you multiply the percent nitrogen in a feed by the factor 6.25?**

ANS: percentage of crude protein in the feed

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

ANS: Lactose

**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 disease "Rickets" in calves is due to a deficiency of:**

**a) Vitamin A b) Vitamin D c) Vitamin E**

ANS: b) Vitamin D

**2. When a calf is born, the normal delivery position is:**

**a) front feet first, then the head b) back feet first c) back first**

ANS: a) front feet first, then the head

**3. The National Dairy Shrine is located in which state?**

ANS: Wisconsin

**4. What part of the cow's stomach has a lining that looks like a honeycomb and serves to trap foreign objects that are eaten such as wire or nails?**

ANS: Reticulum

**5. The founder of Hoard's Dairyman magazine was:**

**a) from North Carolina b) a former governor of Wisconsin**

**c) a former vice-president of the U.S.**

ANS: b) a former governor of Wisconsin