

## 2003 Senior Dairy Quiz Bowl Questions Round 03

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 normally occurs first in a lactating dairy cow, peak milk production or peak feed intake?

ANS: Peak milk production

2. What is the number of days that DHIA lactation records are standardized to?

ANS: 305 days

3. How many days are there between heat periods in the normal cow?

ANS: 21 days (range 18 to 24)

**4. Gossypol is a chemical compound which has been found to be toxic to some livestock when fed in excess. Name a common feed ingredient that may contain gossypol.**

ANS: Cottonseed meal or Whole cottonseed

**5. Which compartment of the ruminant stomach is also known as "manyplies" and functions to squeeze fluid out of the digesta:**

**a) rumen b) reticulum c) omasum d) abomasum**

ANS: c) omasum

**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 does the abbreviation MUN stand for?**

ANS: Milk Urea Nitrogen

**2. A deficiency of what mineral has been associated with retained placenta in cows and White Muscle Disease in calves?**

**a) copper b) iron c) selenium d) phosphorous**

ANS: c) selenium

**3. What are the basic structural units of protein?**

ANS: Amino acids

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

ANS: Iodine

**5. What is the name of the process that breaks up the fat globules so that they are evenly distributed in the milk?**

ANS: Homogenization

**6. When are the two times that a cow is most susceptible to becoming infected with coliform mastitis?**

a) peak lactation and dry off c) at calving and at dry off

b) peak lactation and mid dry period d) at calving and mid dry

ANS: c) at calving and at dry off

**7. The "ring test" conducted on milk samples is a screening test for what cattle disease?**

ANS: Brucellosis (also known as Bangs disease)

**8. Calving ease data is most useful when selecting sires for this category of dairy animals:**

a) late lactation cows b) heifers c) dry cows

ANS: b) heifers

**9. In a 600 cow breeding herd with a 50% conception rate, how many cows would need to be bred the third time?**

ANS: 150

**10. Cottonseed hulls are often included in the rations of dairy cows and heifers because they are a good source of:**

**a) protein b) fat c) fiber d) energy**

ANS: c) fiber

**11. What is the name of the by-product that results from the cheese manufacturing process?**

ANS: whey

**12. What is the name of the acute infection caused by the spore-forming bacteria, *Bacillus anthracis*, that primarily affects livestock?**

**a) anthrax c) Johnes Disease**

**b Foot and Mouth disease d) Rabies**

ANS: a: anthrax

**13. What is the name of the primary milk protein?**

ANS: Casein

**14. What is another name for the metabolic disorder acetonemia?**

**a) brucellosis b) leptospirosis c) ketosis**

ANS: c) ketosis

**15. The lining of this compartment of the ruminant stomach looks like a honeycomb and functions to trap objects such as nails and wire that the cow may accidentally eat. What is the name of this stomach compartment?**



**a) rumen b) reticulum c) omasum d) abomasum**

ANS: b) reticulum

**16. What is the name of the hormone produced by the corpus luteum that maintains pregnancy?**

**a) testosterone b) progesterone c)estrogen d) oxytocin**

ANS: b) progesterone

**17. Nutritionally, a low milk fat test is an indication of a deficiency of:**

**a) protein b) energy c) fiber d) selenium**

ANS: c) fiber

**18. In reference to feed analysis, what do the initials NPN stand for?**

ANS: Non-protein nitrogen

**19. Deoxynivalenol (DON), T2, Zearalenone and Fumonisin are examples of:**

**a) lipids b) mycotoxins c) proteins d) carbohydrates**

ANS: b) mycotoxins

**20. Which of the following is a B vitamin:**

**a) tyrosine b) casein c) niacin d) carotene**

**ANS: c) niacin**

**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. Where in the reproductive tract does fertilization of the ova take place?**

ANS: oviduct

**2. Assuming that the cow has access to plenty of water, what is the other most important factor affecting milk yield when feeding a balanced ration?**

ANS: dry matter intake

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

ANS: Type-Production Index

**4. 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?**

ANS: 40%

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

ANS: BEST LINEAR UNBIASED PREDICTION