

**2008 Senior Dairy Quiz Bowl Questions**

**Round 01**

**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. Research has shown that by formulating lactating cow rations with proper amounts of certain amino acids, we can decrease the crude protein content of the ration and reduce which one of the following:**

- a) bloat      b) acidosis      c) metritis      d) nitrogen excretion to the environment**

ANS: d) nitrogen excretion to the environment

**2. Distillers grains is a by-product feed that results from the production of which one of the following:**

- a) wheat flour      b) ethanol      c) molasses      d) corn gluten meal**

ANS: b) ethanol

**3. What is the term for the process where, in the presence of light, chlorophyll-containing plants convert carbon dioxide and other elements into simple carbohydrates with oxygen also being produced?**

ANS: Photosynthesis

**4. During digestion, which one of the following is an enzyme that functions to break down fat (or lipids)?**

- a) peptidase      b) lipase      c) amylase      d) lactase**

ANS: b) lipase

**5. In reference to dairy herd management, which of the following describes morbidity rate?**

- a) the number of death losses      b) the average daily gain of the animals  
c) the number of sick animals in a certain period of time**

ANS: c) the number of sick animals in a certain period of time

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. A deficiency of this vitamin in the ration can cause an oxidized flavor to develop in milk. What is the name of this vitamin?

ANS: Vitamin E

2. What is the term for the condition when an excessive amount of lymph fluid accumulates between the skin and the secretory tissue of the udder in a cow after calving?

ANS: edema

3. In which of the following categories do the substances fumonisin and zearalenone belong?

a) lipids      b) carbohydrates      c) mycotoxins      d) protein

ANS: c) mycotoxins

4. Which one of the following describes Biotin ?

a) an amino acid      b) a trace mineral      c) a B-vitamin      d) a source of fiber

ANS: c) a B-vitamin

5. Which one of the following is caused by clostridium bacteria?

a) acidosis      b) blackleg      c) nitrate poisoning      d) ketosis

ANS: b) blackleg

**6. What is the name of the group of hormones, produced in the uterus, that causes regression of the corpus luteum, and contractions of the uterus?**

ANS: prostaglandins

**7. In dairy cows, what is the name of the disease caused by the organisms Staph. aureus, Strep. uberis and Klebsiella?**

ANS: Mastitis

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

ANS: Non-protein nitrogen

**9. What is the name of the class of chemicals used to kill internal parasites in cattle?**

ANS: Anthelmintics

**10. To help prevent milk fever, anionic salts may be added to close-up dry cow rations. What type of electrical charge does an anion have?**

ANS: Negative charge

**11. What is the name of the toxic pigment that can be found in cottonseed?**

ANS: Gossypol

**12. What does the acronym NEFA stand for?**

ANS: Non- Esterified Fatty Acid

**13. Which one of the following is the name of the condition in which a cow comes into heat every few days?**

a) gestation   b) anestrus   c) cystic   d) lactation

ANS: c) cystic

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

ANS: Alveoli

**15. What is the name of the instrument that can be used on the farm to measure the quality of the colostrum before feeding?**

ANS: Colostrometer

**16. What is the name of the hormone that is released when a cow is frightened?**

ANS: Adrenaline (epinephrine)

**17. What disease is caused by *Mycobacterium paratuberculosis*?**

ANS: Johne's Disease

**18. Why is the feed additive Poloxalene often added to feed rations when cows are grazing clover?**

ANS: To prevent bloat

**19. What is the name of the substance that can be present at high levels in drought-stressed forages, especially following a rain, that can be toxic to dairy animals?**

ANS: Nitrates

**20. Five hundred (500) pounds of whole milk should yield about how many pounds of cheese?**

ANS: 50 pounds of cheese

**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 one of the following ingredients would you expect to find in a milk replacer?**

**a) cottonseed hulls    b) soybean meal      c) dried whey      d) wheat bran**

ANS: c) dried whey

**2. Which one of the following is the most costly form of mastitis?**

- a) acute      b) chronic      c) clinical      d) subclinical**

ANS: d) subclinical

**3. If the fermentation process in a silo full of corn silage is proceeding correctly, what happens to the pH of the corn silage?**

- a) it increases      b) it decreases      c) it does not change**

ANS: b) it decreases