

**2009 Senior Dairy Quiz Bowl Questions**

**Round 05**

**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 the term for the condition involving the ovaries when the cow comes into heat every few days?**

- a) lactation                  b) cystic                  c) anestrus                  d) placenta**

ANS: b) cystic

**2. What is the term that describes the “energy used up in the consumption, digestion and metabolism of a feed”?**

- a) gross energy                  b) net energy                  c) heat increment**

ANS: c) heat increment

**3. What is determined by multiplying the nitrogen content of a feed by 6.25?**

- a) crude protein                  b) carbohydrate content                  c) energy level**

ANS: a) crude protein

**4. What bacterial infection occurs in the eyes of cattle that can result in blindness and is thought to be spread by flies?**

ANS: Pinkeye

**5. What part of the cell is known as the powerhouse of the cell because of the amount of energy produced in this part?**

- a) mitochondrion (or mitochondria)                  b) cell membrane                  c) neutron**

ANS: a) mitochondrion (or mitochondria)

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. How many fatty acids does a triglyceride molecule contain?

ANS: Three

2. What is the name of the blister-like structure on the ovary that contains the egg before ovulation?

ANS: follicle

3. Which breed normally has the least amount of calving difficulty?

a) Jersey      b) Holstein      c) Brown Swiss      d) Guernsey

ANS: a) Jersey

4. What hormone is released by the pineal gland in response to longer day length?

ANS: Melatonin

5. Which of the following is the most costly form of mastitis?

a) subclinical      b) acute      c) clinical      d) flaky

ANS: a) subclinical

6. What does the homogenization process do?

a) sterilizes the milk      b) distributes the fat evenly throughout the milk  
c) pasteurizes the milk      c) make yogurt

ANS: b) distributes the fat evenly throughout the milk

**7. Cellulose, hemicellulose and lignin are the components of:**

- a) acid-detergent fiber (ADF)      b) crude protein      c) neutral detergent fiber (NDF)  
d) rumen-undegradable protein (RUP)

ANS: c) neutral detergent fiber (NDF)

**8. What is the CMT test used for?**

ANS: to detect mastitis

**9. What hormone is secreted by the corpus luteum?**

ANS: progesterone

**10. Which of the following has a negative charge?**

- a) chlorine      b) sodium      c) potassium

ANS: a) chlorine

**11. How many pounds of hard cheese can be made from 500 pounds of whole milk?**

ANS: 50

**12. Which of the following is listed under the "Body Capacity" category on the Dairy Cow Unified Score Card?**

- a) pasterns      b) withers      c) barrel      d) neck

ANS: c) barrel

**13. What is the common name for "parturient paresis"?**

ANS: milk fever (or hypocalcemia)

**14. Cows exposed to sunlight will make this vitamin on their own?**

ANS: Vitamin D

**15. Soybean meal is commonly added to calf starters to provide:**

- a) energy      b) fiber      c) protein      d) carbohydrate

ANS: c) protein

**16. What compartment of the ruminant stomach has a mucus lining to protect the surface from hydrochloric acid (HCL)?**

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

ANS: d) abomasum

**17. What is the name of the most desirable acid produced during corn silage fermentation that functions to preserve the silage in a silo?**

ANS: lactic acid

**18. What does MUN stand for?**

ANS: Milk Urea Nitrogen

**19. What dry period length will maximize milk production in the following lactation?**

- a) 90 days      b) 60 days      c) 40 days      d) 30 days**

ANS: b) 60 days

**20. What does P.I. stand for in reference to milk quality testing?**

ANS: Preliminary Incubation

**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 these ingredients would you expect to find in a milk replacer?**

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

ANS: b) dried whey

**2. Approximately how much water does normal whole milk contain?**

- a) 97.5 %      b) 87.5 %      c) 77.5 %      d) 67.5 %**

ANS: b) 87.5 %

**3. Which of these states has the most dairy farms?**

- a) Wisconsin      b) Maryland      c) Georgia**

ANS: a) Wisconsin