

**2015 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. 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 C20 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
- d) 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 component of milk is estimated by the milk cryoscope test?

**ANS: water**

10. Which of the following is the main advantage to using a "Brown Midrib" variety for corn silage?

- a) higher silage yields
- b) higher lignin content
- c) lower lignin content and greater fiber digestibility

**ANS: c) lower lignin content and greater fiber digestibility**

11. The most economical method of cooling cows is:

- a) evaporative cooling
- b) air conditioning
- c) fans

**ANS: evaporative cooling**

12. Grass or alfalfa silages that are ensiled with too much moisture can result in the formation of an undesirable organic acid that has a strong odor. What is the name of this acid?

**ANS: Butyric acid**

13. What is the name of the process where legume plants like alfalfa and clover convert atmospheric nitrogen into nitrogenous compounds that are useful to the plants?

**ANS: Nitrogen fixation**

14. During which of the following age ranges are dairy calves usually weaned?

a) 2 to 3 weeks    b) 6 to 8 weeks    c) 10 to 12 weeks    d) 18 to 20 weeks

**ANS: b) 6 to 8 weeks**

15. Which of the following is the name of the iron-binding protein found in milk that has anti-microbial activity.

a) selenium    b) lactoferrin    c) IgG    d) alkaline phosphatase

**ANS: lactoferrin**

16. What is the name of the major respiratory disease in calves?

**ANS: pneumonia**

17. In dairy cattle judging, which of the following is not part of the topline?

a) loin    b) chinec) thurl

**ANS: c) thurl**

18. The quality of a forage is generally most affected by:

a) variety    b) method of harvesting    c) stage of maturity at harvest    d) method of storage

**ANS: c) stage of maturity at harvest**

19. Which of the following is not a legume:

a) soybeans    b) lespedeza    c) red clover    d) triticale

**ANS: d) triticale**

20. Which of the following is not a primary organism associated with mastitis:

- a) Staphylococcus aureus
- b) Streptococcus agalactia
- c) Streptococcus uberous
- d) Brucella abortus

**ANS: d) Brucella abortus**

**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. Corn distiller's grains is high in this amino acid that is essential for milk production:

- a) lysine
- b) tryptophan
- c) arginine
- d) methionine

**ANS: d) methionine**

2. When comparing fertility in dairy animals, which of the following are usually the least fertile?

- a) heifers
- b) second lactation cows
- c) third lactation cows
- d) aged cows

**ANS: d) aged cows**

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

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

**ANS: c) full siblings**

