

2011 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. Anionic salts are often fed to prevent milk fever in dairy cows. Which of the following is the best time to feed them?

- a) during the 3 weeks after calving b) during the 2 weeks before calving
c) at the beginning of the dry period

ANS: b) during the 2 weeks before calving

2. The Net Energy requirement of lactating cows is closest to:

- a) .75 Mcal/lb b) 1.2 Mcal/lb c) 2.0 Mcal/lb

ANS: a) .75 Mcal/lb

3. Which one of the following is the name of the disease caused by a bacterial infection of a spiral shaped bacterium (spirochete) called Borrelia burgdorferi?

- a) pasturella b) Lymes disease c) shipping fever d) Johnes disease

ANS: b) Lymes disease

4. What is the term for how well cows convert feed into milk? This is usually expressed as pounds of milk produced per pound of feed consumed.

- a) income over feed cost b) metabolic requirement c) feed efficiency

ANS: c) feed efficiency

5. What term is used to describe the net price received by farmers for milk. It includes all payments received for milk sold and any deductions for costs associated with marketing the milk.

- a) floor price b) overall price c) mailbox price d) deposit price

ANS: c) mailbox price

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. Bovatec® and Rumensin® increase the production of a certain volatile fatty acid (VFA) in the rumen. Which one of the following is the name of this volatile fatty acid?

- a) acetate b) lactate c) butyrate d) propionate

ANS: d) propionate

2. When evaluating a cow's production performance her DIM must be considered. What does DIM stand for?

ANS: Days In Milk

3. Name the type of protein that passes through the rumen and is unchanged by microbes?

ANS: Rumen Undegradable Protein or RUP (also accept bypass protein)

4. A deficiency of which mineral has been associated with retained placenta in cows and white muscle disease in calves?

ANS: selenium

5. What is the term for a substance that, when introduced into the body, brings about an immune response by a specific antibody?

- a) immunoglobulin b) antioxidant c) antigen d) hormone

ANS: c) antigen

6. In which season of the year is pinkeye in cattle most prevalent?

ANS: Summer

7. Cows are more sensitive to electricity than humans. How much electrical current (stray voltage) is generally considered significant enough to affect the behavior and production of cows?

ANS: ½ volt (0.5 volt)

8. Milk should be cooled to what temperature (degrees F) within 30 minutes of milking?

a) 13 degrees b) 24 degrees c) 38 degrees d) 52 degrees

ANS: c) 38 degrees

9. Dry matter is the amount of feed left after what is removed?

ANS: water

10. Poloxalene is used to prevent what condition in grazing cattle?

ANS: bloat

11. What mycotoxin causes most concern because it is carcinogenic and has the possibility of contaminating the human food supply?

ANS: aflatoxin

12. What is the name of the category on the new PDCA Dairy Cow Unified Score Card that combines body capacity and dairy character?

ANS: Dairy Strength

13. What is the name for the period of time that a heifer or cow is pregnant?

ANS: gestation

14. What is the function of the hormone progesterone?

**a) causes cows to show signs of estrus b) maintains pregnancy
c) stimulates milk letdown**

ANS: b) maintains pregnancy

15. Which of the following is the main reason that dairy cattle nutritionists get concerned about the amount of lignin in forages?

- a) cellulose b) hemicellulose c) lignin is not digestible by the dairy cow
d) vitamin A status

ANS: c) lignin is not digestible by the dairy cow

16. What metabolic disease is indicated when there is a noted smell of acetone on the cow's breath and the cow goes off feed?

ANS: Ketosis

17. What group of hormones, produced in the uterus, causes regression of the corpus luteum, and contractions of the uterus?

ANS: Prostaglandins

18. What does it mean when a heifer is overconditioned?

- a) she is emaciated b) she is too fat c) she is too thin

ANS: b) she is too fat

19. How many pairs of chromosomes do dairy cattle have?

ANS: 30

20. Intramuscular injections are given in the muscle, while intravenous injections are given in the vein. Where are subcutaneous injections given?

ANS: under the skin

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. An oxidized flavor in milk is caused by a deficiency of which vitamin in the lactating cow's diet?

ANS: Vitamin E

2. What enzyme is used to coagulate milk when making cheese?

ANS: Rennet

3. If a herd's conception rate is 50%, what percentage of the cows should be pregnant after two services?

a) 25% b) 50% c) 75% d) 80%

ANS: c) 75%