

2010 Senior Dairy Quiz Bowl Questions

Round 07

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 one of the following is inorganic and is the preferred bedding for free stalls?

- a) wood shavings b) “green” sawdust c) sand d) straw

ANS: c) sand

2. Which of the following is the main reason for not feeding excessive protein in the ration?

- a) nitrogen toxicity b) protein toxicity c) it is expensive and wasteful

ANS: c) it is expensive and wasteful

3. Which compartment of the ruminant stomach has a lining that looks like a honeycomb and functions to trap wire, nails or other objects the cow may eat?

ANS: Reticulum

4. Write this down. A cow is eating 50 pounds of dry matter each day. This dry matter contains 17% crude protein. How many pounds of crude protein is the cow consuming each day?

ANS: 8.5 pounds of crude protein

Calculation: 50 pounds of dry matter x 0.17 = 8.5 pounds of crude protein

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

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. Name the part of the cow that is located between the dew claw and the hoof.

ANS: pastern

2. During heat stress, which one of the following times is closest to when a typical cow's internal body temperature peaks?

a) 11:30 p.m. b) 11:30 a.m. c) 7:30 p.m. d) 7:30 a.m

ANS: a) 11:30 p.m.

3. Which one of the following is likely to happen when we feed too much crude protein in the ration?

a) DA (displaced abomasum) b) fatty liver c) acidosis
d) increase in nitrogen excretion to the environment

ANS: d) increase in nitrogen excretion to the environment

4. What is the term for a protein that acts as a catalyst in starting or speeding up certain chemical reactions during nutrient metabolism?

ANS: enzyme

5. What is the name of the toxic pigment that can be found in whole cottonseed?

ANS: gossypol

6. What are the secretory cells in the mammary gland that are arranged in grape-like structures called?

ANS: alveoli

7. In what city and state is the National Dairy Shrine located?

ANS: Fort Atkinson, Wisconsin

8. Which of the following is the average duration of standing heat in a dairy cow?

a) 6-12 hours b) 12-18 hours c) 18-24 hours d) 24-36 hours

ANS: b) 12-18 hours

9. 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

10. What is the process called when an egg from a cow and spermatozoa from a bull are joined?

ANS: fertilization

11. The total amount of energy that a feed contains can be determined in the laboratory using a “bomb calorimeter”. What is the term for this total amount of energy?

ANS: Gross Energy

12. Which of the following forages normally has the lowest protein content

a) orchardgrass pasture b) alfalfa hay c) corn silage

ANS: corn silage

13. On the new PDCA scorecard, how many points are allocated for “Rear Feet and Legs”?

ANS: 20 points

14. Regarding reproduction, what is the name of the condition in which a cow comes into heat every few days?

ANS: cystic

15. Which of the following causes ringworm in calves:

- a) lice b) fungus c) bacteria**

ANS: b) fungus

16. Which of the following is the most economically important form of mastitis:

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

ANS: d) subclinical

17. In reference to a dairy cow, what does the term "Dystocia" mean?

- a) the cow refuses to eat b) the cow is lame c) the cow has calving difficulty**

ANS: c) the cow has calving difficulty

18. What is the wax-like material that lines the teat canal?

ANS: keratin

19. What vitamin is necessary to prevent calves from developing rickets?

ANS: Vitamin D

20. A.I. organizations package semen in straws with each straw containing approximately:

- a) 1000 to 3000 sperm cells b) 10 thousand to 30 thousand sperm cells
c) 10 million to 30 million sperm cells**

ANS: c) 10 million to 30 million sperm cells

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. Name the part of the cow that is located at the bottom end of the tail:

ANS: Switch

2. Which one of the following accounts for the largest share of the expenses in producing milk?

a) labor b) mastitis c) feed d) electricity

ANS: c) feed

3. Which one of the following is found in the greatest amount in corn grain?

a) starch b) fat c) fiber d) protein

ANS: a) starch