

2004 Senior Dairy Quiz Bowl Questions

Round 02

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 volatile fatty acid produced in the rumen is a precursor for glucose?

ANS: Propionate

2. What is the name of the document that establishes the standards for Grade A milk?

ANS: Pasteurized Milk Ordinance (also accept PMO)

3. The DRMS is located in Raleigh. What does DRMS stand for?

ANS: Dairy Records Management Systems

4. What is the term used to describe a period of increased growth rate in heifers that follows a growth restriction earlier in the heifer's life?

ANS: Compensatory growth (or compensatory gain)

5. The use of DCAD when formulating rations for close-up dry cows may help to prevent milk fever when they freshen. What do the letters DCAD stand for?

ANS: Dietary Cation-Anion Difference

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. Deoxynivalenol (DON), T2, Zearalenone and Fumonisin are examples of:

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

ANS: d) mycotoxins

2. If a 1300 pound cow is eating an amount of feed dry matter equivalent to 4% of its body weight, how many pounds of feed dry matter is the cow eating?

ANS: 52 pounds

3. What is the term used to describe the genetic make-up of an individual?

ANS: genotype

4. In a dairy cow diet, generally as the level of fiber increases, what happens to the energy level?

a) it increases b) it decreases c) it stays the same

ANS: b) it decreases

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

a) unrelated b) full siblings c) identical

ANS: b) full siblings

6. When evaluating the ability of a ration to maintain good rumen function, what is “chewing time in minutes per pound of feed” used to measure?

a) soluble fiber b) “effective” fiber c) digestible fiber

ANS: b) “effective” fiber

7. The factor that affects the concentration of protein in a forage the greatest is:

a) stage of maturity b) weed control c) amount of lime applied to the field

ANS: a) stage of maturity

8. Which of the following is a B vitamin:

a) biotin b) casein c) tyrosine d) carotene

ANS: a) biotin

9. What is a zygote?

ANS: A fertilized egg

10. The official placing on a class of cows is 3-1-2-4 with cuts of 6-4-2. Your placing is 1-3-4-2. What is your score?

ANS: 42

11. Which compartment of the ruminant stomach is also known as “manyplies” and functions to squeeze fluid out of the digesta:

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

ANS: c) omasum

12. Which of the following stages of growth is the most costly period when raising dairy heifers?

a) 100 to 200 pounds c) 700 to 800 pounds
b) 300 to 400 pounds d) 1,200 to 1,300 pounds

ANS: a) 100 to 200 pounds

13. Cottonseed meal or whole cottonseed may contain a chemical compound that has been found to be toxic to dairy cattle when fed in excess. What is the name of this chemical?

a) calcium carbonate b) gossypol c) ascorbic acid

ANS: b) gossypol

14. The lining of the rumen is covered with finger-like projections that serve to increase the surface area for absorption of nutrients. What is the name of these finger-like projections?

a) papillae b) colon c) metatarsals

ANS: a) papillae

15. Which of the following are the names of the three sections of the small intestine?

a) colon, gall bladder, appendix b) duodenum, jejunum, ileum
c) omasal orifice, cecum, colon

ANS: b) duodenum, jejunum, ileum

16. “Hardware disease” can occur when a piece of wire or metal that the cow accidentally consumes punctures what part of the ruminant stomach?

ANS: Reticulum

17. Which of the following is formed when glucose and galactose combine?

a) fructose b) sucrose c) lactose d) dextrose

ANS: c) lactose

18. Which of the following is the term for the total amount of energy that a feed contains that is determined by bomb calorimetry?

a) net energy b) heat increment c) gross energy d) digestible energy

ANS: c) gross energy

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

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

ANS: b) subclinical

20. You purchase one ton (2000 pounds) of dairy feed that contains 16% crude protein. How many pounds of crude protein did you buy?

ANS: 320 pounds

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 hormone is released from the anterior pituitary gland and stimulates follicular growth?

ANS: FSH or follicle stimulating hormone

2. What is the term used to describe the physical characteristics and performance of an individual?

ANS: Phenotype

3. When referring to genetic evaluations, what do the letters BLUP stand for?

ANS: BEST LINEAR UNBIASED PREDICTION