

2008 Junior Dairy Quiz Bowl Questions

Round 06

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. A cow is consuming 50 pounds of dry matter from a total mixed ration (TMR) that contains 50% moisture. How many actual (as-fed) pounds of the TMR is the cow eating?

- a) 50 pounds**
- b) 100 pounds**
- c) 250 pounds**

ANS: b) 100 pounds

Calculation: 50 pounds of dry matter divided by 50% dry matter in the TMR

2. Lactose is the name of the sugar that is found only in milk. Which of the following combine to form lactose?

- a) glucose and fructose**
- b) glucose and galactose**
- c) glucose and sucrose**
- d) glucose and aspartame**

ANS: b) glucose and galactose

3. In reference to digestion and metabolism, which one of the following describes "heat increment"?

- a) NE_L**
- b) the energy used up in the consumption, digestion and metabolism of a feed**
- c) the total amount of energy in a feed determined by bomb calorimetry**

ANS: b) the energy used up in the consumption, digestion and metabolism of a feed

4. What is the name of the term for a farm's unique identification number that is part of the National Animal Health Identification System?

ANS: Premises ID

5. Which part of the milking machine functions to alternate vacuum and atmospheric pressure in the space between the teat cup shell and the liner?

- a) regulator**
- b) pulsator**
- c) compressor**

ANS: b) pulsator

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. Which one of the following is the approximate amount of cheese that can be made from 60 pounds of whole milk?

- a) 20 pounds b) 10 pounds c) 6 pounds d) 4 pounds

ANS: c) 6 pounds

2. On the PDCA Dairy Cow Unified Score Card, how many points are assigned to the “Feet and Legs” category?

- a) 10 b) 15 c) 20 d) 40

ANS: a) 15

3. In the dairy cow, what is the name of the gland that produces the hormone oxytocin?

ANS: Pituitary gland

4. Which one of the following terms is defined as the period when the calf is developing in its mother’s womb?

- a) parturition b) lactation c) gestation d) eructation

ANS: c) gestation

5. What part of the cow does laminitis affect?

ANS: Hooves (or feet)

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

ANS: 48

7. Which of the following is often a factor that causes calves to develop respiratory illness?

- a) when calves are kept in individual outdoor hutches
- b) when calves are raised outside on pasture
- c) when calves are kept in a warm, moist barn that is not well-ventilated

ANS: c) when calves are kept in a warm, moist barn that is not well-ventilated

8. Which one of the following abbreviations refers to the part of feed protein that is not degraded in the cow's rumen?

- a) RDP
- b) RAC
- c) RUP

ANS: c) RUP

9. Which one of the following describes a zoonotic disease (or zoonoses)?

- a) a disease found only in zoos
- b) an incurable disease
- c) a subclinical disease
- d) a disease that is transmitted between vertebrate animals and humans

ANS: d) a disease that is transmitted between vertebrate animals and humans

10. Which one of the following is the primary reason that a nutritionist would add a “Bentonite” to a feed ration?

- a) to provide a source of energy
- b) to provide a source of phosphorous
- c) to bind mycotoxins in the feed

ANS: c) to bind mycotoxins in the feed

11. Which one of the following must be adequate in the dairy cow diet to prevent grass tetany?

- a) salt
- b) selenium
- c) lysine
- d) magnesium

ANS: d) magnesium

12. What do the initials BST stand for?

ANS: Bovine somatotropin

13. Which one of the following is the approximate percentage of solids in normal milk?

- a) 20% b) 25% c) 13% d) 5%

ANS: c) 13%

14. Your veterinarian advises you to drench your cow with propylene glycol. What metabolic disorder are you trying to prevent?

ANS: Ketosis (also accept acetonemia)

15. Which one of the following is the season of the year when consumer demand for dairy products is typically the lowest?

- a) spring b) summer c) fall d) winter

ANS: b) summer

16. Which of the following feeds is a by-product of an ethanol fuel production facility?

- a) alfalfa b) fescue c) distillers grains d) clover

ANS: c) distillers grains

17. The recommended procedure of dipping the newborn calf's navel in a 7% tincture of iodine solution will help to prevent which of the following conditions in the neonatal calf:

- a) foot rot b) pneumonia c) scours d) navel-ill (or joint-ill)

ANS: d) navel-ill (or joint-ill)

18. When you measure the circumference of the heart girth of a dairy heifer with a special tape, what are you trying to estimate?

ANS: Body weight

19. What is the name of the toxic yellow pigment that can be found in cottonseed?

ANS: Gossypol

20. When you enter the show ring with your dairy animal, should you walk clockwise or counterclockwise?

ANS: Clockwise

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. How many amino acids are considered to be “essential” by the dairy cow and therefore must be provided in the diet?

- a) 30 b) 20 c) 10

ANS: c) 10

2. What disease are we trying to prevent by dipping the teats in a special solution following milking?

ANS: mastitis

3. Which one of the following terms or phrases is used in dairy cattle judging to describe when the area on the cows’ back located between the chine and the rump dips and is not strong?

- a) winged shoulder b) sickle-hocked c) cow-hocked d) weak in the loin

ANS: d) weak in the loin