

2006 Junior 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 name of the primary digestive process that occurs in the rumen?

ANS: Fermentation

2. Name the city and state where the National Dairy Shrine is located.

ANS: Fort Atkinson, Wisconsin

3. When referring to a dairy cow diet, what do the letters TMR stand for?

ANS: Total Mixed Ration

4. On the PDCA Dairy Judging Scorecard, in which category is the rump?

ANS: Frame

5. What do the initials DHIA stand for?

ANS: Dairy Herd Improvement Association

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 describes lysine and methionine?

- a) minerals
- b) sources of carbohydrate
- c) sources of bypass fat
- d) amino acids considered to be first limiting or co- limiting for milk protein synthesis

ANS: d) amino acids considered to be first limiting or co- limiting for milk protein synthesis

2. At which of the following temperatures should milk be held in the farm bulk tank?

- a) 60 degrees F
- b) 50 degrees F
- c) 38 degrees F

ANS: c) 38 degrees F

3. Which of the following causes "grass tetany" in cattle grazing lush green pastures?

- a) bloat
- b) coccidiosis
- c) a deficiency of magnesium in the diet

ANS: c) a deficiency of magnesium in the diet

4. What are acetate, propionate and butyrate?

- a) volatile fatty acids (VFA) produced in the rumen
- b) amino acids
- c) somatic cells

ANS: a) volatile fatty acids produced in the rumen

5. Approximately how many pounds of cheese can be made from 20 pounds of whole milk?

- a) 20 b) 10 c) 2 d) 1

ANS: c) 2

6. What happens to the fiber content in a forage crop as it grows and matures?

- a) it does not change b) it decreases c) it increases

ANS: c) it increases

7. Which of the following describes "ovulation"?

- a) parturition b) palpation c) milk ejection d) the release of an egg from a follicle

ANS: d) the release of an egg from a follicle

8. Which of the following describes heat or estrus in a dairy cow?

- a) gestation b) dry period c) the name of the condition when a cow is receptive to be bred

ANS: c) the name of the condition when a cow is receptive to be bred

9. What is the name of the muscle that keeps the teat end closed and helps prevent organisms from entering the udder?

ANS: Sphincter muscle

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

ANS: Pasteurized Milk Ordinance (also accept PMO)

11. During cold weather, what happens to the calf's requirement for energy:

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

ANS: a) it increases

12. Which one of the following stomach compartments receives the milk directly when a calf nurses milk?

- a) rumen b) reticulum c) abomasum

ANS: c) abomasum

13. What is the common name for the condition known as “parturient paresis”?

- a) mastitis b) milk fever c) displaced abomasum d) laminitis

ANS: b) milk fever

14. In dairy cattle judging, which of the following is the part of the cow you are referring to when you describe the cow as being sickle-hocked?

- a) loin b) rear legs c) front legs d) chine

ANS: b) rear legs

15. What is the name of the wax-like material that lines the teat canal?

ANS: keratin

16. Which one of the six major dairy breeds originated in the United States?

ANS: None of the major dairy cow breeds originated in the United States

17. Which one of the following feeds will increase the level of effective fiber in a dairy cow ration?

- a) corn grain b) soybean meal c) cottonseed hulls d) hominy

ANS: c) cottonseed hulls

18. What is another name for a calf’s father?

- a) dam b) offspring c) sire d) progeny

ANS: c) sire

19. Bypass protein refers to the part of feed protein that, in the cow’s rumen, is:

- a) undegraded b) degraded c) fermented to volatile fatty acids

ANS: a) undegraded

20. What is the common name for the disease caused by the bacteria *Mycobacterium paratuberculosis*?

- a) Bovine Leukosis Virus (BLV) b) Johne's (pronounced "yo-nees") disease
c) mastitis

ANS: b) Johne's disease

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. During which season of the year is the consumer demand for dairy products typically the lowest?

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

ANS: b) summer

2. What is the name of the feed component found in plant cell walls that is not digestible by the cow?

ANS: Lignin

3. Why do dairy farmers often place a KAMAR detector on the rump of their cows?

ANS: To help detect heat or estrus