

2016 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 determined by multiplying the nitrogen content of a feed by 6.25?

- a) crude protein b) carbohydrate content c) energy level**

ANS: a) crude protein

2. Dairy farmers calculate IOFC to help evaluate their profitability. What does the abbreviation IOFC stand for?

ANS: Income over feed cost(s)

3. In a lactating dairy cow, which one of the following is the hormone released when a cow is frightened and is responsible for a cow not having milk letdown?

- a) adrenaline (or epinephrine) b) oxytocin c) progesterone**

ANS: a) adrenaline (or epinephrine)

4. What is the average duration of standing heat in a dairy cow?

- a) 2-4 hours b) 12-18 hours c) 18-24 hours d) 24-36 hours**

ANS: b) 12-18 hours

5. Cellulose, hemicellulose and lignin are the components of:

- a) acid detergent fiber (ADF)
b) crude protein
c) neutral detergent fiber (NDF)
d) rumen-undegradable protein (RUP)**

ANS: c) neutral detergent fiber (NDF)

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. What is the primary sugar found in milk?

- a) lactose b) cellulose c) sucrose

ANS: a) lactose

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

ANS: 30

3. In reference to milk quality, what is the maximum legal limit of somatic cells concentration (cells/ml) that milk can contain?

ANS: 750,000 cells/ml

4. The National Dairy Shrine Museum is located in which of the following locations?

- a) Madison, Wisconsin b) Fort Atkinson, Wisconsin
c) Louisville, Kentucky d) Harrisburg, Pennsylvania

ANS: b) Fort Atkinson, Wisconsin

5. How many upper incisors does a cow have?

- a. Two b. Four c. None

ANS: c. None

6. The Guernsey breed originated on a British Channel Island. What other dairy breed originated on a Channel Island?

ANS: Jersey

7. Which of the following is the normal delivery position when a calf is born?

- a) back feet first b) shoulders first c) front feet first and then the head

ANS: c) front feet first and then the head

8. The number of dairy cows in the US peaked in what year?

- a) 1885 b) 1945 c) 1985 d) 2010

ANS: b) 1945

9. What is the name of the small projections that line the wall of the small intestine and function to absorb nutrients?

ANS: Villi

10. What happens to the body weight of an early lactation dairy cow when she enters the negative energy balance phase of the lactation cycle?

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

ANS: b) it decreases

11. What is the name used for a diagram of a dairy animal's ancestors?

- a) sire summary b) pedigree c) PC-DART

ANS: b) pedigree

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

- a) 200 pounds b) 400 pounds c) 600 pounds d) 800 pounds

ANS: b) 400 pounds

13. Which one of the following is the greatest cause of a displaced abomasum?

- a) excess protein b) genetic defects c) low fiber rations

ANS: c) low fiber rations

14. Anaerobic manure digesters convert what gas into electricity?

ANS: Methane

15. Which class is Grade A milk that is used for fluid consumption assigned?

- a) Class I b) Class II c) Class III d) Class IV

ANS: a) Class I

16. What is the minimum amount of silage that should be removed from the exposed surface of a trench silo each day to prevent spoilage?

- a) 6 inches b) 12 inches c) 24 inches d) 36 inches

ANS: a) 6 inches

17. The time period after calving when you choose not to breed a cow is abbreviated VWP. What does VWP stand for?

ANS: Voluntary Waiting Period

18. What is the term for 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)

19. The process of flushing fertilized eggs from donor cows and implanting them in recipient cows is called:

- a) artificial insemination b) gestation c) embryo transfer

ANS: c) embryo transfer

20. When an injection is given subcutaneously, where is the material deposited?

ANS: Just 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. Dry matter intake by lactating Holstein cows generally averages about:

- a) 20 to 30 lbs. b) 45 to 50 lbs. c) 90 to 100 lbs.**

ANS: b) 45 to 50 lbs.

2. What term, common to ruminants, describes a bolus of regurgitated food that is chewed and re-swallowed?

ANS: cud

3. A young calf needs energy to maintain body functions under normal conditions, which ranges from 50 degrees F to 78 degrees F. What is this temperature range referred to as?

- a) comfort range b) heat index c) thermal-neutral zone**

ANS: c) thermal-neutral zone