

**2011 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. Which one of the following is a good source of starch in the cow's diet?**

- a) alfalfa hay      b) corn grain      c) soybean meal**

ANS: b) corn grain

**2. In a forage analysis, what is measured to determine the crude protein content in the forage?**

- a) Calcium      b) Sulfur      c) Nitrogen      d) Fiber**

ANS: c) Nitrogen

**3. As of 2010, what state has the highest milk production per cow?**

- a) Michigan      b) Wisconsin      c) New Mexico      d) California**

ANS: c) New Mexico

**4. The duodenum, jejunum and ileum are three sections of the \_\_\_\_\_.**

- a) large intestine      b) small intestine      c) cow's reproductive tract**

ANS: b) small intestine

**5. What is the name of the tiny, finger-like projections which line the wall of the rumen and increase the surface area for absorption of nutrients?**

- a) crypts      b) jejunum      c) leaves      d) papillae**

ANS: d) papillae

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. When a calf nurses milk, what is the name of the structure that diverts the milk into the omasum and abomasum?

ANS: esophageal groove

2. In lactating dairy cows, a low milk fat test is an indication of a low ration level of:

a) protein      b) energy      c) fiber

ANS: c) fiber

3. How many days are there between heat periods in dairy cattle that are cycling normally?

a) 18-21 days      b) 12-15 days      c) 28-30 days

ANS: a) 18-21 days

4. In the small intestine, nutrients are absorbed through fingerlike projections called \_\_\_\_\_.

ANS: Villi

5. According to the 2009 Dairy Cow Unified Score Card, how many points are assigned to rear feet and legs?

ANS: 20 points

6. Name the part of the cow's topline that is located between the withers and the loin.

ANS: chine

7. What is the largest component of milk at 87.5% ?

ANS: water

**8. Which of the following normally occurs first during a lactation cycle?**

- a) peak feed intake   b) peak milk production   c) both occur at the same time

ANS: b) peak milk production

**9. Which compartment of the ruminant stomach has a lining that resembles a honeycomb and functions to trap nails, wire, or other metal pieces that the cow may accidentally eat?**

ANS: reticulum

**10. Which one of the following minerals provided in excess during the dry period may result in milk fever?**

- a) Sodium                      b) Selenium                      c) Calcium                      d) Phosphorous

ANS: c) Calcium

**11. What is the name of the piece of equipment in a milking system which keeps vacuum at a constant level?**

- a) pulsator                      b) regulator                      c) claw                      d) inflation

ANS: b) regulator

**12. What are the basic structural components of proteins called?**

ANS: amino acids

**13. Who is the Commissioner of Agriculture for North Carolina?**

ANS: Steve Troxler

**14. Which one of the following causes ringworm?**

- a) bacteria                      b) virus                      c) fungus

ANS: c) fungus

**15. A deficiency of this trace mineral has been associated with retained placenta in cows and white muscle disease in calves?**

- a) potassium                      b) iron                      c) selenium                      d) magnesium

ANS: c) selenium

**16. Drought-stressed forages can be toxic to dairy animals if they contain:**

- a) high levels of protein      b) high levels of fat      c) high levels of nitrates

ANS: c) high levels of nitrates

**17. Approximately how many pounds of blood must be pumped through the udder to produce one pound of milk?**

- a) 50 to 100      b) 100 to 200      c) 200 to 300      d) 400 to 500

ANS: d) 400 to 500

**18. How many amino acids are considered to be essential in the dairy cow and are required in the diet?**

ANS: 10

**19. What infection causes milk somatic cell counts to increase?**

ANS: Mastitis

**20. Which section of the reproductive tract does the A.I. inseminating rod pass through immediately before the semen is deposited?**

- a) uterine horn      b) cervix      c) rectum

ANS: b) cervix

**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. What part of the alfalfa plant has the highest % digestibility?**

ANS: the leaves

**2. TDN is a common term to nutritionists. What does TDN stand for:**

- a) Total Digestible Nutrients
- b) Total Dietary Nitrogen
- c) Total Daily Needs

ANS: a) Total Digestible Nutrients

**3. When should cows with mastitis be milked?**

- a) first
- b) last
- c) in any group

ANS: b) last