

**2009 Senior Dairy Quiz Bowl Questions**

**Round 01**

**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 best describes the lining of the reticulum?**

- a) honeycomb                      b) covered with papillae for nutrient absorption
- c) a mucous covered lining to protect it from the hydrochloric acid that is secreted

ANS: a) honeycomb

**2. Write this down: Calculate your heifer's average daily gain (ADG) if she weighs 100 pounds at birth and 450 pounds at 200 days of age.**

ANS: 1.75 pounds per day ADG

Calculation: 450 pounds minus 100 pounds birth weight = 350 pounds of gain; 350 pounds of gain divided by 200 days of age = 1.75 pounds ADG

**3. During digestion, what does the enzyme lipase do?**

- a) breaks down carbohydrates                      b) breaks down protein
- c) breaks down fat (or lipids)

ANS: c) breaks down fat (or lipids)

**4. Milk should be cooled to what temperature within 30 minutes after milking is completed?**

- a) 50 ° F                      b) 38° F                      c) 20° F                      d) 15 ° F

ANS: b) 38° F

**5. What milk component content is determined using the milk cryoscope test?**

- a) protein                      b) fat                      c) water                      d) carbohydrate

ANS: c) water

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 name of the enzyme that is added to milk to make cheese?

ANS: Rennet

2. Typical milking unit inflations have a useful life of about how many milkings?

a) 100      b) 250      c) 500      d) 1200

ANS: d) 1200

3. Most A.I. organizations recommend that inseminators should place semen in this section of the reproductive tract:

a) cervix      b) uterine body      c) uterine horn      d) fallopian tube

ANS: b) uterine body

4. In a high producing, early lactation dairy cow, what happens to her body weight when she enters a negative energy balance phase?

ANS: It decreases

5. Which of the following best describes Klebsiella?

a) a mastitis causing bacteria      b) a respiratory disorder      c) a hoof infection  
d) a feed additive

ANS: a) a mastitis causing bacteria

**6. What is the common name of the condition when the pH of the rumen drops to a low level?**

ANS: acidosis

**7. Before starting the Ovsynch program, cows are given two injections of which one of the following during the Presynch phase?**

**a) prostaglandin    b) GnRH    c) adrenaline    d) oxytocin**

ANS: a) prostaglandin

**8. What is the name of the volatile fatty acid (VFA) produced in the rumen that is used to form glucose?**

ANS: Propionate

**9. Which of the following is not a good source of energy for dairy cows?**

**a) corn grain    b) corn gluten feed    c) fish meal    d) barley grain**

ANS: c) fish meal

**10. What is the name of the foundation that provides the majority of the funding support for the North Carolina Dairy Youth Program?**

ANS: North Carolina Dairy Youth Foundation

**11. In the reproductive tract of a dairy cow, how many uterine horns are there?**

**a) one    b) two    c) three    d) four**

ANS: b) two

**12. At the end of a Holstein animal registration name, what do the letters E-T stand for?**

ANS: Embryo Transfer

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

**a) bacteria    b) virus    c) fungus**

ANS: c) fungus

**14. Your veterinarian says that a cow is in the first trimester. What does that mean?**

- a) first 3 months of pregnancy
- b) first 3 months of lactation
- c) first part of the dry period

ANS: a) first 3 months of pregnancy

**15. What term describes a calf that is born dead?**

ANS: Stillbirth or Stillborn

**16. How many points are allotted for Feet and Legs on the PDCA Dairy Cow Unified Score Card?**

ANS: 15

**17. In the ruminant digestive system, what is the name of the first section of the small intestine that is connected to the abomasum?**

ANS: Duodenum

**18. Manure digesters convert what gas into electricity?**

ANS: Methane

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

ANS: Mastitis

**20. In what city and state does the annual Jersey Jug Futurity take place?**

ANS: Louisville, Kentucky

**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 one of the following is not a B-vitamin?**

**a) carotene    b) folic acid (folate)                      c) niacin                      d) biotin**

ANS: a) carotene

**2. Five hundred (500) pounds of milk should yield about how many pounds of hard cheese?**

ANS: 50 pounds of hard cheese

**3. In which bovine stomach compartment are B-complex vitamins and Vitamin K produced?**

ANS: Rumen