

2016 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. In reference to dairy cattle genetics, which one of the following describes the term “reliability”?**

- a) the predictability of a genetic valuation      b) the marketability of a genetic valuation  
c) the accuracy of a genetic valuation

ANS: c) the accuracy of a genetic valuation

**2. Which one of the following is the largest dairy milk marketing cooperative in the U.S.?**

- a) Maryland and Virginia Milk Producers  
b) Land O’ Lakes  
c) Dairy Farmers of America (DFA)  
d) California Dairies

ANS: c) Dairy Farmers of America (DFA)

**3. One of your recently fresh cows is ill. She has been receiving a high grain, low roughage diet. The consistency of the small amount of manure she produces is "putty-like". Your veterinarian detects a "pinging" sound when using his stethoscope. What is the most likely diagnosis?**

ANS: Left Displaced Abomasum (also accept LDA; DA; or displaced abomasum)

**4. In reference to milk processing, what describes “the cost of turning milk into cheese”?**

- a) income over feed costs      b) “make allowance”  
c) somatic cell counts      d) amount of waste milk from treated cows

ANS: b) “make allowance”

**5. Which one of the following is the term for the diet that we feed to dairy cows 2 to 3 weeks before the expected calving date?**

- a) high group diet      b) low group diet      c) low fiber diet      d) transition diet

ANS: d) transition diet

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. How many points are allotted for dairy strength on the new PDCA Dairy Cow Unified Score Card?

ANS: 25

2. What is the more common name for "ruminal tympany"?

ANS: bloat

3. In which of the following categories do the substances fumonisin and zearalenone belong?

a) lipids      b) carbohydrates      c) mycotoxins      d) protein

ANS: c) mycotoxins

4. What part of the cell is known as the powerhouse of the cell because of the amount of energy produced in this part?

a) villi      b) cell membrane      c) mitochondrion (or mitochondria)

ANS: a) mitochondrion (or mitochondria)

5. Which one of the following is often responsible for a low milk fat test in your herd?

a) feeding too much protein      b) low "effective fiber" level in the ration  
c) feeding cottonseed hulls      d) feeding hay

ANS: b) low "effective fiber" level in the ration

6. Where does fertilization of the ova take place?

ANS: Oviduct

7. What is the name of the by-product that results from the cheese manufacturing process?

ANS: whey

8. Which one of the following describes "Voluntary Waiting Period (abbreviated VWP)?"

- a) the time period just before calving when you are waiting for the calf to be born
- b) the time period that the cows are held in the holding pen
- c) the time period after pre-dipping the cows before the milking unit is attached
- d) the time period after calving when you choose not to breed a cow

ANS: d) the time period after calving when you choose not to breed a cow

9. Propionate, butyrate, and acetate are volatile fatty acids (VFA's) produced in the rumen. What volatile fatty acid is used by the liver to make glucose?

ANS: Propionate

10. To help prevent milk fever, anionic salts may be added to close-up dry cow rations. What type of electrical charge does an anion have?

ANS: Negative charge

11. Which of the following countries has the greatest population of dairy cows?

- a) United States
- b) France
- c) Denmark
- d) India

ANS: d) India

12. What are zoonoses?

ANS: Diseases and infections that can be transmitted between animals and humans

13. What is the name of the bacteria that causes "Circling Disease" in cattle?

ANS: Listeria

14. At what temperature should milk be held in the farm bulk tank?

- a) 58 degrees F
- b) 48 degrees F
- c) 38 degrees F
- d) 28 degrees F

ANS: c) 38 degrees F

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

- a) first 3 months of pregnancy
- b) second 3 months of lactation
- c) second 3 months of pregnancy

ANS: c) second 3 months of pregnancy

**16 . The Net Energy requirement of lactating cows is closest to:**

- a) .75 Mcal/lb
- b) 1.5 Mcal/lb
- c) 2.0 Mcal/lb

ANS: a) .75 Mcal/lb

**17. What disease is caused by *Mycobacterium paratuberculosis*?**

ANS: Johne's Disease

**18. Where is the embryo placed during embryo transfer?**

ANS: uterine horn

**19. Which one of the following is the reason that we apply tail paint and Kamar devices on certain dairy cows?**

- a) to improve dry matter intake
- b) to help detect heat (estrus)
- c) to increase milk production

ANS: b) to help detect heat (estrus)

**20. Where, in the dairy cow's reproductive system, is estrogen produced?**

ANS: the ovary

**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. Chromosomes are found in what part of the cell?**

ANS: nucleus

**2. What is the name of the enzyme that is added to milk to make cheese?**

ANS: Rennet

**3. What is the approximate percentage of dairy calves born in the U.S. that are bulls?**

a) 42%      b) 52%      c) 62%

ANS: c) 52%