

2007 Senior Dairy Quiz Bowl Questions

Round 03

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 terms is used to describe when a cow has a difficult or abnormal calving?

- a) dyspnea b) dystocia c) ketosis d) acetonemia

ANS: b) dystocia

2. Which one of the following countries has reported the most cases of BSE since 2003?

- a) Canada b) United Kingdom c) Japan d) United States

ANS: b) United Kingdom

3. Dairy cattle are most comfortable within which of the following temperature ranges?

- a) 30 to 35 degrees F b) 50 to 55 degrees F c) 70 to 75 degrees F

ANS: b) 50 to 55 degrees F

4. During digestion, which one of the following is an enzyme that functions to break down fat (or lipids)?

- a) peptidase b) lipase c) amylase d) lactase

ANS: b) lipase

5. Dairy farms with this herd size produce the largest percentage of the milk in the United States?

- a) 100 to 499 cows b) 600 to 900 cows c) 1000 to 2000 cows d) Over 2000 cows

ANS: a) 100 to 499 cows

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 best describes zoonotic diseases (zoonoses)?

- a) incurable diseases b) subclinical diseases
- c) diseases that are transmitted between vertebrate animals and humans

ANS: c) diseases that are transmitted between vertebrate animals and humans

2. What is the term for the condition when an excessive amount of lymph fluid accumulates between the skin and the secretory tissue of the udder in a cow after calving?

- a) metritis b) edema c) acetonemia d) ketosis

ANS: b) edema

3. Which of the following is the number of pairs of chromosomes that dairy cattle have?

- a) 10 b) 20 c) 30 d) 40

ANS: c) 30

4. Which one of the following best describes the lining of the rumen?

- 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: b) covered with papillae for nutrient absorption

5. When referring to pasteurization of calf milk, what does the acronym HTST stand for?

ANS: High Temperature Short Time

6. In reference to the reproductive system of a dairy cow, what is the proper name for the structure often called a “yellow body”?

a) cervix b) ovary c) follicle d) corpus luteum

ANS: d) corpus luteum

7. Which of the following describes rennet?

a) a mineral feed additive b) a coccidiostat that is added to calf starter
c) the name of the enzyme that is added to milk to make cheese

ANS: c) the name of the enzyme that is added to milk to make cheese

8. On a DHIA record, which of the following describes the number of days from calving until first breeding date?

a) calving interval b) days open c) days to first service

ANS: c) days to first service

9. Which of the following is the name of the class of chemicals used to kill internal parasites in cattle?

a) antibiotics b) anthelmintics c) clostridia

ANS: b) anthelmintics

10. In which one of the following breeds is DUMPS, an inherited condition which results in embryonic death, found?

a) Holstein b) Jersey c) Guernsey

ANS: a) Holstein

11. When evaluating the ability of a ration to maintain good rumen function, what does “chewing time in minutes per pound of feed” measure?

a) soluble fiber b) “effective” fiber c) digestible fiber d) milk urea nitrogen

ANS: b) “effective” fiber

12. Which of the following are the two most limiting amino acids for milk production?

- a) arginine and threonine b) methionine and lysine c) leucine and valine

ANS: b) methionine and lysine

13. In which of the following breeds is age at first calving the lowest?

- a) Ayrshire b) Brown Swiss c) Holstein d) Jersey

ANS: d) Jersey

14. In which one of the following parts of the digestive system are the immunoglobulins in colostrum absorbed in a newborn calf?

- a) rumen b) large intestine c) small intestine d) abomasum

ANS: c) small intestine

15. What is the name of the bacteria that causes the disease known as "Circling Disease" in cattle?

ANS: Listeria

16. If the fermentation process in a silo full of corn silage is proceeding correctly, what happens to the pH of the corn silage?

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

ANS: b) it decreases

17. Which of the following is the main advantage to using a "Brown Midrib" corn variety for silage?

- a) higher yields
b) higher lignin content and lower fiber digestibility
c) lower lignin content and greater fiber digestibility

ANS: c) lower lignin content and greater fiber digestibility

18. Which of the following states has the most dairy farms?

- a) Virginia b) Wisconsin c) Florida c) Kentucky

ANS: b) Wisconsin

19. Rumensin (monensin) and Bovatec (lasalocid) are classified as which of the following?

- a) bypass protein b) mineral supplements c) ionophores d) carbohydrate

ANS: c) ionophores

20. ME production is a way to compare younger cows with older herdmates. What do the letters ME stand for?

ANS: Mature Equivalent

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 ingredients would you expect to find in a milk replacer?

- a) cottonseed hulls b) soybean meal c) dried whey d) wheat bran

ANS: c) dried whey

2. Dairy farmers in North Carolina often use water sprinklers and fans on their cows in order to reduce the effects of which of the following:

- a) fatty liver b) foot rot c) heat stress d) mastitis

ANS: c) heat stress

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

ANS: Whey