

2006 Senior 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 describes the process of homogenization in milk?

- a) clarification b) pasteurization
- c) the manufacturing process that distributes the fat evenly throughout milk

ANS: c) the manufacturing process that distributes the fat evenly throughout milk

2. What position does Mike Johanns hold in our Federal government?

ANS: Secretary of Agriculture

3. If a corn silage sample contains 68% moisture, what percentage dry matter does it contain?

ANS: 32% dry matter

4. Which of the following is a B vitamin:

- a) biotin b) casein c) tyrosine d) carotene

ANS: a) biotin

5. Which of the following describes acetate, propionate and butyrate?

- a) three primary volatile fatty acids produced in the rumen b) three of the essential amino acids
- c) three vitamins required in the ration

ANS: a) three primary volatile fatty acids produced in the rumen

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 sperm cell with a Y chromosome fertilizes an egg, what sex will the offspring be?

ANS: Male

2. Which one of the following is the reason for including cottonseed hulls in a dairy ration?

- a) to increase the level of energy b) to increase the level of protein
c) to increase the fiber level

ANS: c) to increase the fiber level

3. Which one of the following can develop in milk when there is a deficiency of Vitamin E in the lactating cow's diet?

- a) low fat test b) an oxidized flavor c) low protein test

ANS: b) an oxidized flavor

4. What disease in dairy cattle does BLV stand for?

ANS: Bovine Leukosis Virus

5. According to the Pasteurized Milk Ordinance (PMO), what is the minimum standard for solids-not-fat of homogenized whole milk?

- a) 3.25% b) 8.25% c) 12.25% d) 15.25%

ANS: b) 8.25%

6. Which one of the following is where the semen should be deposited when using artificial insemination (A.I.) on a dairy cow?

- a) oviduct b) cervix c) uterine body d) fallopian tubes**

ANS: c) uterine body

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

ANS: 400 pounds

8. In reference to feed analysis, what do the initials "NPN" stand for?

ANS: Non-protein nitrogen

9. On the Dairy Cow Unified Score Card, under which category is the "hocks"?

ANS: Feet and Legs

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

ANS: North Carolina Dairy Youth Foundation

11. What is the name of the stomach disorder in which the cow's fourth stomach compartment twists out of normal position?

- a) acidosis c) ketosis**
b) displaced abomasum (DA) d) milk fever

ANS: b) displaced abomasum (DA)

12. Which one of the following best describes the function of a pulsator on a milking machine?

- a) it signals that milk is flowing b) it provides electrical pulses to stimulate milk let-down**
c) it functions to alternate vacuum and atmospheric pressure in the space between the teat cup shell and the liner

ANS: c) it functions to alternate vacuum and atmospheric pressure in the space between the teat cup shell and the liner

13. Which one of the following often happens to a calf that is kept in a warm, moist barn that is not well-ventilated?

- a) it grows faster b) it develops respiratory illness c) it consumes more feed

ANS: b) it develops respiratory illness

14. Approximately how many pounds of cheese can be made from 20 pounds of whole milk?

- a) 20 b) 10 c) 2 d) 1

ANS: c) 2

15. Which one of the following feeds can be used to replace the forage in a ration?

- a) soybean meal b) cottonseed hulls c) barley grain

ANS: b) cottonseed hulls

16. In reference to calf health, which one of the following is why you should use a "colostrometer"?

- a) to measure the quality of the colostrum before feeding b) to measure water quality
c) to measure the temperature and humidity index in the barn

ANS: a) to measure the quality of the colostrum before feeding

17. In a newborn calf, which stomach compartment is the largest relative size (as a percentage of the total stomach capacity)?

- a) rumen b) reticulum c) omasum d) abomasum

ANS: d) abomasum

18. What is the term for the disease "undulant fever" when it affects cattle?

ANS: brucellosis

19. Which compartment of the ruminant stomach functions in a similar manner as the human stomach?

- a) Rumen b) Reticulum c) Omasum d) Abomasum

ANS: d) Abomasum

20. On a feed ration report, you see that the copper concentration is listed as 10 ppm. What does ppm stand for?

ANS: parts per million

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 of the following vitamins is water-soluble?

a) Vitamin A b) Vitamin D c) niacin

ANS: c) niacin

2. In reference to dairy cattle nutrition, what does "RUP" stand for?

ANS: rumen undegradable protein

3. Who is the current Commissioner of Agriculture in North Carolina?

ANS: Steve Troxler