

2011 Junior 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. Ovulation is the process of:

- a) delivering a calf from the uterus**
- b) milk ejection from an alveolus**
- c) release of an egg from a follicle**

ANS: c) release of an egg from a follicle

2. Which one of the following can happen when we feed excess crude protein in the ration?

- a) decreased fertility**
- b) fatty liver**
- c) acidosis**

ANS: a) decreased fertility

3. When cows are frightened what hormone is released into the blood stream?

- a) Oxytocin**
- b) Adrenaline**
- c) Prostaglandin**
- d) Progesterone**

ANS: b) Adrenaline

4. In the udder, where does the milk go just before it goes out into the milking machine?

- a) alveoli**
- b) myoepithelial cells**
- c) lumen**
- d) teat cistern**

ANS: d). teat cistern

5. What compartment of the cow's stomach is called the true stomach?

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

ANS: b) abomasum

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. There are 9 kilocalories of energy provided in one gram of:

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

ANS: b) fat

2. Lactose is the primary sugar found in ____?

- a) non-protein nitrogen b) corn silage c) milk

ANS: c) milk

3. Which one of the following is the largest operating expense on most dairy farms?

- a) vet bill b) labor cost c) feed cost

ANS: c) feed cost

4. Which one of the following is the term for a large and complex protein material that is capable of causing disease and that reproduces only inside a host cell?

- a) protozoa b) bacteria c) virus d) staphylococcus aureus

ANS: c) virus

5. In reference to forage analysis, what does “ADF” stand for?

ANS: acid detergent fiber

6. Metritis is the technical name for what condition?

- a. Birth**
- b. Uterine infection**
- c. Lameness**
- d. Retained placenta**

ANS: b. Uterine infection

7. What compartment in the cow's stomach collects hardware such as nails or pieces of metal that the cow may eat?

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

ANS: d) reticulum

8. The major advantage in feeding a TMR ration is:

- a. Every bite the cow takes is the same**
- b. Reduction in labor**
- c. Feed requirements are increased by 20%**
- d. A convenient way to feed silage**

ANS: a. Every bite the cow takes is the same

9. What normally happens to the butterfat test when cows are fed a low fiber and high energy ration?

- a. it does not change**
- b. it increases**
- c. it decreases**

ANS: c. it decreases

10. In a cow, which stomach compartment is known as the honeycomb?

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

ANS: d) reticulum

11. What vitamin is needed for blood clotting?

- a. Vitamin B**
- b. Vitamin K**
- c. Vitamin A**
- d. Vitamin D**

ANS: b. Vitamin K

12. What are acetate, propionate and butyrate classified as?

- a. VFA's (volatile fatty acids)**
- b. Minerals**
- c. Protein**
- d. Vitamins**

ANS: a. VFA's (volatile fatty acids)

13. Feeding too much of this chemical compound found in whole cottonseed can be toxic to cattle. What is the name of this compound?

ANS: gossypol

14. Where did the Guernsey breed originate?

- a. Netherlands**
- b. France**
- c. Belgium**
- d. Isle of Guernsey in the English Channel**

ANS: d. Isle of Guernsey in the English Channel

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

ANS: Nucleus

16. What is another name for “calving difficulty”?

- a. metritis**
- b. diverticulitis**
- c. dystocia**
- d. cystic**

ANS: c. dystocia

17. In what part of the reproductive system are the eggs produced?

ANS: ovaries

18. What do we call the procedure that uses hormones to alter the estrous cycle of cows to bring them into heat at the same time?

ANS Estrus synchronization

19. Abnormal heat cycle length, lack of heat periods, or a cow in constant heat is often caused by what?

- a. feeding too much carbohydrate**
- b. sexed semen**
- c. cystic ovaries**
- d. KAMAR heat patches**

ANS: c. cystic ovaries

20. Feeding too low a level of this mineral in the ration leads to grass tetany or grass staggers:

- a. calcium**
- b. selenium**
- c. phosphorous**
- d. magnesium**

ANS: d. magnesium

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 is a pH less than 7?

- a. **Basic**
- b. **Neutral**
- c. **Acid**

ANS: c. Acid

2. What is the first milk produced after birth called?

ANS: Colostrum

3. What is the temperature of liquid nitrogen found in a semen storage tank?

ANS: Minus 320 degrees Fahrenheit