

**2009 Junior Dairy Quiz Bowl Questions**

**Round 02**

**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. The disease Cryptosporidiosis (“Crypto”) in calves is caused by a protozoan parasite. Which one of the following sections of the digestive system does “Crypto” mainly affect?**

- a) rumen      b) reticulum      c) esophagus      d) small intestine**

ANS: d) small intestine

**2. Why is colostrum from older cows normally higher in antibody concentration than colostrum from first calf heifers?**

- a) older cows have given birth to more calves      b) older cows produce more milk  
c) older cows have had more exposure to disease and have developed more antibodies**

ANS: c) older cows have had more exposure to disease and have developed more antibodies

**3. Write this down. A cow is consuming 200 pounds of a total mixed ration that contains 55% dry matter. How many pounds of dry matter is the cow eating?**

- a) 55 pounds      b) 100 pounds      c) 110 pounds**

ANS: a) 110 pounds

Calculation: 200 pounds times 55% dry matter = 110 pounds of dry matter

**4. What branch of the Federal government is the National Agricultural Statistics Service (NASS) a part of?**

- a) Food and Drug Administration (FDA)      b) U.S. Department of Agriculture (USDA)  
c) U.S. Census Bureau**

ANS: b) U.S. Department of Agriculture (USDA)

**5. Which one of the following is the name of the condition that can exist in a cow after calving when an excessive amount of lymph fluid accumulates between the skin and the secretory tissue of the udder?**

- a) bloat      b) ketosis      c) metritis      d) udder edema**

ANS: d) udder edema

**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. Why are cottonseed hulls often included in dairy rations?**

**a) to provide protein      b) to provide energy      c) to provide fiber**

ANS: c) to provide fiber

**2. In the ruminant digestive system, which one of the following is the name of the first section of the small intestine that is connected to the abomasum?**

**a) duodenum      b) jejunum      c) ileum      d) colon**

ANS: a) duodenum

**3. What is the name of the small projections that line the wall of the small intestine that function to absorb nutrients?**

ANS. Villi

**4. Which one of the following is the reason that we should we give a dairy heifer a special magnet that will stay in her reticulum?**

**a) to help prevent ketosis      b) to help prevent metritis  
c) to help prevent “hardware disease”**

ANS: c) to help prevent “hardware disease”

**5. 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

**6. What organization provides the majority of funding for the North Carolina 4-H Dairy Youth Program?**

ANS: North Carolina Dairy Youth Foundation

**7. How many double bonds does a completely hydrogenated (saturated) fat contain?**

- a) 2            b) 4            c) 6            d) none

ANS: d) none

**8. Grade A milk that is used for fluid consumption is classified into which of the following classes?**

- a) Class 1    b) Class 2    c) Class 3    d) Class 4

ANS: a) Class 1

**9. What is the name of the feed component found in plant cell walls that is not digestible by the cow?**

ANS: Lignin

**10. What disease does Mycobacterium paratuberculosis cause?**

ANS: Johnes disease (pronounced YO-NEES disease)

**11. Which one of the following is the name of the condition when a dairy cow is receptive to be bred?**

- a) artificial insemination    b) heat (or estrus)    c) cloning    d) gestation

ANS: b) heat (or estrus)

**12. In the process of artificial insemination (A.I.) on a dairy cow, what section of the reproductive tract does the inseminating rod pass through before the semen is deposited?**

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

ANS: a) cervix

**13. What main problem is caused when a calf has scours and not enough fluids are absorbed?**

- a) rumination    b) dehydration    c) chelation

ANS: b) dehydration

**14. What hormone is critical in the initiation and maintenance of lactation?**

- a) estrogen      b) oxytocin      c) prolactin

ANS: c) prolactin

**15. Which one of the following is an example of a mineral found in dairy cattle diets:**

- a) biotin      b) niacin      c) calcium      d) nitrogen

ANS: c) calcium

**16. What happens to the calf's energy requirement during cold weather?**

- a) it decreases      b) it increases      c) it stays the same

ANS: b) it increases

**17. Which one of the following is a true fat molecule that contains glycerol and three fatty acids?**

- a) glycogen      b) apoprotein      c) mitochondria      d) triglyceride

ANS: d) triglyceride

**18. Which one of the following is the proper name for the condition known as milk fever?**

- a) mastitis      b) parturient paresis      c) founder      d) laminitis

ANS: b) parturient paresis

**19. Which of the following countries has the greatest number of dairy cows?**

- a) United States      b) England      c) India      d) Brazil

ANS: c) India

**20. What toxic substance is most likely to be found in frost-damaged sorghum?**

ANS: Prussic acid

**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 six major dairy breeds originated in the United States?**

ANS: None of the major dairy cow breeds originated in the United States

**2. What compartment of the ruminant digestive system is termed “manyplies”?**

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

ANS: c) omasum

**3. Approximately how many gallons of blood must pass through the udder in order for the cow to produce one gallon of milk?**

a) 400-500 gallons      b) 40-50 gallons                      c) 10-15 gallons

ANS: a) 400-500 gallons