

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. Two (2) primary gases are produced in the rumen during the condition known as bloat. One of these gases is carbon dioxide. What is the name of the other primary gas produced?

ANS: Methane

2. When evaluating a farm's business records, what is determined by subtracting the total liabilities from the total assets?

- a) total income      b) net worth      c) monthly payments to a lender

ANS: b) net worth

3. Which of the following IS NOT a point a judge looks for when judging a fitting and showmanship contest?

- a) animal's condition      b) animal's conformation  
c) clipping      d) appearance of showman

ANS: b) animal's conformation

4. Adding fat is a useful method of increasing the concentration of one component of a ration. What is the component?

ANS: Energy

5. When compared to normal corn silage, brown-midrib corn silage has more energy and higher digestibility. This is due largely to its lower content of what?

- a.      Starch  
b.      Lignin  
c.      Fat  
d.      Potassium

Answer: b. Lignin

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. What is another name for a calf's father?

- a) dam   b) offspring   c) sire   d) progeny

ANS: c) sire

2. Class II milk is milk used for:

- a) fluid milk  
b) cottage cheese, ice cream and yogurt  
c) hard cheese and butter

ANS: b) cottage cheese, ice cream and yogurt

3. Which of the following is a type of protein found in colostrum that provides passive immunity to the calf?

- a) somatic cells                      b) immunoglobulins                      c) erythrocytes

ANS: b) immunoglobulins

4. Glucose and Galactose combine to make the sugar found in milk. What is the name of this sugar?

ANS: Lactose

5. As corn silage ferments properly in the silo, what happens to the pH of the silage?

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

ANS: b) it decreases

**6. Which of the following forages should contain the highest level of protein?**

- a) corn silage      b) alfalfa hay      c) small grain silage      d) fescue hay

ANS: b) alfalfa hay

**7. In reference to a sire summary, what does the abbreviation PTA stand for?**

ANS: predicted transmitting ability

**8. What disease are we trying to prevent by dipping the teats in a special solution following milking?**

ANS: mastitis

**9. What is the term used in dairy cattle judging when a cow is close at the hocks?**

- a) single-hocked      b) sickle-hocked      c) cow-hocked      d) post-legged

ANS: c) cow-hocked

**10. What is the number of days in milk for a standard lactation?**

ANS: 305 days

**11. What are zoonotic diseases (or zoonoses)?**

- a) diseases found only in zoos    b) incurable diseases    c) subclinical diseases  
d) diseases that are transmitted between vertebrate animals and humans

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

**12. What is the term for an injection given just under the skin?**

ANS: subcutaneous

**13. In early lactation, a high producing dairy cow will mobilize her body fat stores as a source of \_\_\_\_\_.**

ANS: Energy

**14. Which major dairy breed has its national headquarters in Brattleboro, Vermont?**

ANS: Holstein

**15. In the cow's reproductive tract, where are the muscular rings found?**

Answer: Cervix

**16. A desirable water temperature for mixing calf milk replacer is approximately:**

- a) 100 degrees F      b) 40 degrees F      c) 150 degrees F**

ANS: a) 100 degrees F

**17. Which is NOT used as a heat detection aid in dairy cattle?**

- a) Tail chalk              b) Pressure sensors              c) CIDR**

ANS: c) CIDR

**18. Which of the following is not classified as a macro-mineral?**

- a) Calcium              b) Phosphorus              c) Potassium              d) Selenium**

Answer: d) Selenium

**19. What is the name of the cheese that is light colored, noted for its firm texture, and known for having holes or air pockets throughout?**

ANS: Swiss cheese

**20. What is the name used for a diagram that shows the dairy animal's ancestors?**

- a) sire summary              b) pedigree              c) registration number**

ANS: b) pedigree

**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. For dairy cattle, which nutrient is the cheapest, most important and required in the largest quantity?**

ANS: Water

**2. What do the letters CIP stand for when referring to equipment sanitation?**

ANS: Clean-in-place

**3. Which of the following would be the least desirable feed for the week-old calf?**

**a) a coarse grain mix                      b) whole milk                      c) corn silage**

ANS: c) corn silage