

Senior Round 1

**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 breed of dairy cattle generally produces milk with the highest protein content?
  - a. Jersey
2. Which of the following is not part of the cow's digestive system?
  - a. Rumen
  - b. Small intestine
  - c. Esophagus
  - d. Pasterns

ANSWER: d. pasterns

3. What are the basic structural units of proteins?
  - a. Amino acids
4. In humans, what mineral is associated with the prevention of osteoporosis?
  - a. Calcium
5. Which of the following are classified as ionophores
  - a. Rumensin (monensin) and bovatec (lasalocid)
  - b. Methionine and lysine
  - c. Calcium and phosphorous

ANSWER: a. rumensin (monensin) and bovatec (lasalocid)

6. Which of the following is formed when glucose and galactose combine?
  - a. Fructose
  - b. Sucrose
  - c. Dextrose
  - d. Lactose

ANSWER: d. lactose

7. What is the name of the enzyme that is needed for humans to digest the sugar found in milk?
  - a. Lactase
8. When do we start feeding dairy cows a "transition diet"
  - a. 2 months after calving

- b. In late lactation just before drying off
- c. 2 to 3 weeks before expected calving

ANSWER: c. 2 to 3 weeks before expected calving

9. What buffering compound is routinely added to dairy rations to help prevent acidosis?
- a. Sodium bicarbonate
10. When a herd develops a low milk fat test, the cause is often a deficiency of:
- a. Protein
  - b. Energy
  - c. Fiber
  - d. Selenium

ANSWER: c. fiber

11. How many amino acids are considered to be essential in the dairy cow, and are therefore required in the diet?
- a. 40
  - b. 30
  - c. 20
  - d. 10

ANSWER: d. 10

12. Which of the following terms refers to practices that prevent the introduction or spread of disease on the farm?
- a. Biosecurity
  - b. Clarification
  - c. Homogenization
  - d. Incubation

ANSWER: a. biosecurity

13. Which of the following is the temperature (in degrees F) of liquid nitrogen?
- a. -120 Degrees F
  - b. -220 Degrees F
  - c. -320 Degrees F
  - d. -420 Degrees F

ANSWER: c. -320 Degrees F

14. A deficiency of the following vitamins causes the disease "rickets" in calves?
- a. Vitamin A
  - b. Vitamin C
  - c. Vitamin E
  - d. Vitamin D.

ANSWER: d. Vitamin D

15. Which one of the following is a calitic limestone used for dairy cattle rations?
- a. Protein supplement
  - b. Energy supplement
  - c. Fat supplement
  - d. Calcium supplement

ANSWER: d. calcium supplement

16. Which one of the following is the definition of metritis?
- a. An infection of the udder
  - b. An infection of the uterus
  - c. Foot rot

ANSWER: b. an infection of the uterus

17. In a newborn calf, which stomach compartment is the largest relative size (as a percentage of the total stomach capacity)
- Rumen
  - Reticulum
  - Omasum
  - Abomasum

ANSWER: d. abomasum

18. What is the term for the disease “undulant fever” when it affects cattle?
- Brucellosis
19. What is the main advantage to using a “brown midrib” corn variety for silage?
- Higher lignin content and lower fiber digestibility
  - Lower lignin content and greater fiber digestibility
  - Higher yield

ANSWER: b. lower lignin content and greater fiber digestibility

20. In which one of the following parts of the digestive system are the immunoglobulins in colostrum absorbed in a newborn calf?
- Abomasum
  - Small intestine
  - Large intestine

ANSWER: b. small intestine