

### Senior Round 3

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. To determine the crude protein content of a feed, which one of the following do we multiply by 6.25?
  - a. The energy content
  - b. The nitrogen content
  - c. The starch content

ANSWER: b. the nitrogen content

2. Which one of the following is an essential fatty acid?
  - a. Methionine
  - b. Lysine
  - c. Linoleic
  - d. Proline

ANSWER: c. linoleic

3. The National Agricultural Statistics Service (NASS) conducts monthly surveys to determine dairy cow numbers and milk production. Which of the following branches of the federal government is NASS a part of?
  - a. U.S. Census Bureau
  - b. Food and Drug administration (FDA)
  - c. Internal Revenue Service
  - d. U.S. Department of Agriculture (USDA)

ANSWER: d. U.S. Department of Agriculture (USDA)

4. Dairy farms with this herd size produce the largest percentage of milk in the United States?
  - a. 100 to 499 cows
  - b. 600 to 900 cows
  - c. 1000 to 2000 cows
  - d. Over 2000 cows

ANSWER: 100-499 cows

5. How many kilocalories of energy are provided by one gram of fat?
  - a. 9 kilocalories
6. In reference to dairy cattle reproduction, what is the name of the blister-like structure on the ovary that contains the egg before ovulation?
  - a. Follicle
7. In the ruminant digestive system, what is the name of the first section of the small intestine that is connected to the abomasum?
  - a. Duodenum
8. Which one of the following is a class of immunoglobulins (or antibodies)?
  - a. FSH
  - IgG
  - b. CLA

ANSWER: IgG

9. What does an elevated milk somatic cell count (SCC) indicate?
  - a. Mastitis Infection
10. What is the CMT test used for?
  - a. To detect mastitis
11. What is the name of the cells that surround the alveolus and contract during milking?
  - a. Myoepithelial cells
12. In the dairy cow's reproductive tract, where does fertilization of the ova take place?
  - a. Oviduct
13. The addition of which of the following feeds will increase the level of effective fiber in a dairy cow ration?
  - a. Corn grain
  - b. Cottonseed meal
  - c. Cottonseed hulls
  - d. Hominy

ANSWER: cottonseed hulls

14. What is the name of the stomach disorder in which the cow's fourth stomach compartment twists out of normal position?
  - a. Displaced Abomasum
15. What is the name of the instrument that can be used on the farm to measure the quality of the colostrum before feeding?
  - a. Colostrometer
16. What is the name of the hormone that is released when a cow is frightened?
  - a. Adrenaline (epinephrine)
17. Which of the following is the main reason that colostrum from older cows is normally higher in antibodies?
  - a. Older cows have given birth to more cows
  - b. Older cows produce more milk
  - c. Older cows have had more exposure to disease

ANSWER: c. older cows have had more exposure to disease

18. What nutritional disease is most often associated with laminitis (founder) in dairy cows?
  - a. Acidosis
19. What is the name of the hormone that enables the cervix to soften and stretch in preparation for calving?
  - a. Relaxin
20. When raising dairy heifers, which of the following stages of growth is the most costly period?
  - a. 100-200 lbs
  - b. 300 to 400 lbs
  - c. 700 to 800 lbs
  - d. 1200 to 1300 lbs

ANSWER: 100 to 200 lbs