**2018 State Stockmen’s Contest Senior Quiz**

\_\_\_\_\_\_ 1. Bull A has a weaning weight EPD of +60. Bull B has a weaning weight EPD of +50. If feeder calves are selling for $150 cwt, how much more will calves sired by Bull A be expected to be worth than calves sired by Bull B?

1. 10 dollars c. 20 dollars
2. 15 dollars d. 7.5 dollars

\_\_\_\_\_\_ 2. New, innovative retail cuts provide opportunities to increase the value of traditionally less valuable primal cuts. The Denver and Flat Iron steaks are two such cuts. From which primal do these originate?

1. Chuck c. Plate
2. Flank d. Round

\_\_\_\_\_\_ 3. How many chromosomes does a pig have?

1. 60 c. 38
2. 23 d. 46

\_\_\_\_\_\_ 4. What is a concern when feeding moldy grain to livestock?

1. Mycotoxin poisoning c. Polioencephalomalacia
2. Water belly d. Hypomagnesemia

\_\_\_\_\_\_ 5. You have just purchased a group of feeder calves that you wish to finish on your farm. These calves have previously consumed a forage based diet with little supplementation. The diet you wish to feed them contains 7.5% alfalfa hay, 37.5% high moisture corn, 25% dry rolled corn, 25% corn gluten feed, and 5% supplement. Which of the following conditions should you have a serious concern about?

1. Scrapie c. Acidosis
2. Grass tetany d. Iron deficiency

\_\_\_\_\_\_ 6. Which part of the grass plant has the most nutritional value?

1. Leaf c. Seed
2. Stem d. There is no difference between the parts of the plant

\_\_\_\_\_\_ 7. A truck load of corn (10% crude protein) and soybean meal (48% crude protein) are delivered to your farm. You wish to formulate a ration that contains 20% crude protein. Using only these two ingredients and balancing only for crude protein, what percentage of corn and soybean meal will you need?

1. 15% soybean meal, 85% corn c. 26% soybean meal, 74% corn
2. 12.5% soybean meal, 87.5% corn d. 31% soybean meal, 74% corn

\_\_\_\_\_\_ 8. Which factors determine yield grades of slaughter cattle?

1. Marbling and maturity
2. 12th rib backfat thickness, Hot carcass weight, kidney pelvic and heart fat, and ribeye area
3. Ribeye area, 12th rib backfat thickness, marbling, and kidney pelvic and heart fat
4. Marbling and 12th rib backfat thickness

\_\_\_\_\_\_ 9. Which retail cut comes from the quarter of a steer?

1. T-bone steak c. sirloin steak
2. Top-round steak d. flank steak

\_\_\_\_\_\_ 10. A sheep with which of the following genotypes at codon 171 would be resistant to scrapie?

1. RR c. QR
2. QQ d. RQ

\_\_\_\_\_\_ 11. Which of the following is NOT preventable by a vaccine?

1. Bloat c. Blackleg
2. Enterotoxemia d. Leptospirosis

\_\_\_\_\_\_ 12. Your doe was marked by the buck on October 19th. When is her approximate kidding date?

1. January 19th c. March 18th
2. February 16th d. April 17th

\_\_\_\_\_\_ 13. Which feedstuff would you expect to contain the least amount of water?

1. Corn silage c. Fescue hay
2. Dried distillers’ grains plus solubles d. Wet distillers’ grains plus solubles

\_\_\_\_\_\_ 14. A 7 day CoSynch + CIDR protocol would be used for which of the following?

1. Low stress weaning c. Vaccination
2. Estrus synchronization d. Growth

\_\_\_\_\_\_ 15. True or false: Feed efficiency increases as animal’s age and increase fat deposition.

1. True b. False

\_\_\_\_\_\_ 16. Which of the following compartments to a ruminant stomach is most similar to the stomach of a monogastric animal?

1. Reticulum c. Omasum
2. Rumen d. Abomasum

\_\_\_\_\_\_ 17. Urinary calculi can result from which of the following issues with mineral levels in the diet?

1. Imbalance between calcium and phosphorous c. Too much iron
2. Too much calcium d. Too much urea

\_\_\_\_\_\_ 18. Which of the following grasses can be the host of endophytes that cause reduced weight gains, pregnancy, and milk production?

1. Orchardgrass c. Ryegrass
2. Alfalfa d. Tall fescue

\_\_\_\_\_\_ 19. The disease bovine spongiform encephalopathy can be attributed to which of the following causes.

1. Bacteria c. Virus
2. Prion d. Parasite

\_\_\_\_\_\_ 20. Which would be expected to be true when comparing 1st cutting hay to 2nd cutting hay?

1. Greater protein content c. Decreased amount of stems
2. Greater number of seedheads d. Both A and B

\_\_\_\_\_\_ 21. Why would you not want to include whole cottonseed in swine diets?

1. Cost c. Low energy and protein content
2. Ergot alkaloid toxicity d. Gossypol toxicity

\_\_\_\_\_\_ 22. A diet consisting of the following ingredients would be most appropriate to be fed as a complete ration for which of the following species?

* 75% corn, 22.5% soybean meal, 1% limestone, 0.25% vitamin mix, 0.25% trace mineral mix, and 1% supplement

1. Cattle c. Goats
2. Swine d. Sheep

\_\_\_\_\_\_ 23. What is the key reason why fat from a forage finished steer might appear yellow?

1. Greater beta carotene c. Toxicity from mycotoxins
2. Decreased chlorophyll d. Less saturated fat

\_\_\_\_\_\_ 24. A heifer is in heat this morning. When should she be artificially inseminated?

1. This morning c. Tomorrow morning
2. Tonight d. Tomorrow night

\_\_\_\_\_\_ 25. A pregnant beef cow consuming a low quality hay may consume 1.8% of her body weight on a dry matter basis each day. How much hay would you expect a 1000 pound cow to consume on an as-fed basis in a day? Assume the hay contains 85% dry matter.

1. 21 pounds c. 180 pounds
2. 18 pounds d. 36 pounds