1. _____ A ewe births twin ram lambs her first year, and triplet ram lambs her second year. Which parent is responsible for determining the sex of the lambs?
   A. The ram     B. The ewe     C. Neither     D. Not enough information

2. Dominant traits are signified by a capital letter, and recessive are signified by a lowercase letter in this case. What kind of trait is an erect ear (EE) in swine?
   A. Recessive     B. Dominant     C. Codominant    D. Overdominant

3. Is it possible for a black bull to sire a red calf?
   a. Yes    b. No

4. The offspring receive half their chromosomes from the mother and half from the father.
   A. True     B. False

5. What is the term for removing sperm from a bull and putting that sperm into a female when she is in heat?
   A. artificial insemination     B. Pregnancy sharing
   C. embryo transfer     D. Estrous Synchronization

6. Which component of the diet has the highest levels of cellulose?
   A. Minerals     B. Wheat     C. Grass     D. Triglycerides

7. Which mineral is necessary in the cow’s diet to promote bone and teeth strength?
   A. Lipids     B. Folic Acid     C. Iron     D. Calcium

8. When formulating a diet, which animal would require more energy?
   A. Ewe with triplet lambs   B. Breeding ram
   C. Both   D. Neither require more than the other

9. Energy requirements for a ewe with twins increase during what phase?
   A. Conception     B. Beginning of gestation
   C. Beginning of lactation     D. Weaning

10. What are the class of compounds used to deworm livestock?
    A. Anthelmintics     B. Antioxidants
    C. Androgens     D. Antigens

11. This part of the reproductive tract is the site where the fetus grows.
    A. Cervix     B. Uterus     C. Ovary     D. Oviducts

12. How many months is the cow’s gestation?
    A. 6 months   B. 12 months   C. 9.5 months   D. 15 months

13. Artificial Insemination is least used in which species?
    A. Beef     B. Sheep     C. Swine     D. All answers

14. What is the term for increasing the energy in the diet several weeks before breeding to encourage maximum ovulation and conception rate?
    A. Stored Energy     B. Fertility     C. Gestation Gain     D. Flushing

15. Which organ in the male’s reproductive tract is where the sperm are produced?
    A. Testicles     B. Cowper’s Gland     C. Seminal Vesicles     D. Ampulla
16. Ossification of the “break joint” is the primary reference on a sheep carcass that is used to determine the age.  
A. True  
B. False

17. Which of the following quality grades is NOT one that is used for pork?  
A. Prime  
B. Choice  
C. Standard  
D. None of the answers are used in pork

18. A retailer wants his beef to be more tender. What is a possible way to achieve this?  
A. Buy older meat  
B. Serve it fresh  
C. Aging  
D. Set the meat on the counter to allow water loss

19. Shrinkage is the loss of weight of an animal. Which scenario induces the MOST shrinkage of fed cattle during transport?  
A. Shorter cattle  
B. Overcrowding  
C. Sedatives  
D. Short trip with 5 head

20. What % yield of lean pork cuts is most desirable?  
A. Higher than 60%  
B. Less than 60%  
C. Pork does not have lean  
D. Pork is not measured on a % basis

21. What primary feed source is being used in ethanol production; causing feed prices to increase?  
A. Barley  
B. Wheat  
C. Soybeans  
D. Corn

22. Which specie is generally considered to be a seasonal breeder?  
A. Swine  
B. Sheep  
C. Beef cattle  
D. None are seasonal breeders

23. What issue hit the beef industry hard earlier this past year?  
A. Low prices  
B. Extremely high levels of Camplyobacter jejuni  
C. Pink Slime  
D. Sickness

24. Which grain is lowest in fiber and highest in energy?  
A. Corn  
B. Barley  
C. Wheat  
D. Oats

25. Hay stocks and grain stocks for livestock in the Midwest will be lower this coming winter. Why is that?  
A. Farmers were not as efficient this past year  
B. They sold off too much before they realized what they needed  
C. The extreme drought this past summer decreased supply  
D. The demand for hay and grain is not as high, so the supply is low