Choose the best answer for each of the following questions. Fill in answers on scantron form.

1. Which of the following is a type of dry cookery?
   A. Frying       B. Braising       C. Stewing       D. All of the above

2. Which of the following plant enzymes is used to tenderize natural smoked sausage casings?
   A. Dextrose       B. Arginine       C. Sausazyme       D. Papain

3. Safe handling instructions must appear on the label of meat for retail sale. What organization regulates the safe handling instructions?
   A. FSIS       B. USDA       C. FDA       D. VDACS

4. How long is meat considered safe in the refrigerator when there is a power outage?
   A. 1 hour       B. 10-12 hours       C. 24 hours       D. 4 hours

5. Freezer storage should be at or below what temperature?
   A. 0°F       B. 32°F       C. 40°F       D. 0°C

6. True or False: Protein maintains blood neutrality of pH 7.0-7.35.
   A. True       B. False

7. What act gave the secretary of agriculture and USDA authorization to regulate livestock marketing and meat packing?
   A. Humane Slaughter Act       B. Wholesome Meat Act       C. Pure Food and Drug Act       D. Packers and Stockyards Act

8. Beef harvested for export to Japan must be under how many months of age?
   A. 9 months       B. 12 months       C. 24 months       D. 30 months

9. What is added to some meat products to prevent the growth of Clostridium botulinum?
   A. Ascorbic acid       B. Sodium nitrite       C. Potassium sorbate       D. Lecithin

10. How long should a steak be allowed to rest after removing from heat to reduce juice loss while slicing?
    A. 30 seconds       B. 1 minute       C. 5 minutes       D. 30 minutes

11. Which is not a hormone used in growth promoting implants?
    A. Estradiol       B. Progesterone       C. Testosterone       D. Prostaglandin

12. Which method of cooking is recommended for less tender cuts of meat?
    A. Broiling       B. Grilling       C. Braising       D. Stir Frying

13. If a steer has been fed in a feedlot for 70 days, what maturity classification would he fall in?
    A. Long-fed       B. Short-fed       C. Choice       D. Grass-fed

***Don't forget to use a #2 Pencil! ***
2017 Virginia Tech Block and Bridle Meats Judging Contest
4-H & FFA Senior Exam

Contestant Number ____________________________ Name ____________________________

14. On average how many calories does 3 ounces of lean meat contain?
   A. 400   B. 300   C. 100   D. 200

15. What are the two myofilaments that make up the sarcomere portion of the muscle?
   A. Mysin and Arginine   B. Actin and Myosin   C. Myofilament A and B   D. Muscles and Tendons

16. Which species is typically aged for the longest amount of time?
   A. Beef   B. Sheep   C. Swine   D. Goat

17. True or False: Dry aging is when meat is held for 10 days to 6 weeks at 34 degrees to 38 degrees in a humidity controlled cooler and not packaged.
   A. True   B. False

18. Which of the following is not a location that you would examine to determine the amount of fat on a lamb carcass?
   A. Flank   B. Internal Fat Covering   C. Neck   D. External Fat Covering

19. Which of the following is a high risk foodborne bacteria in ready-to-eat products such as jerky and snack sticks?
   A. Trichinella spiralis   B. Listeria monocytogenes   C. Salmonella   D. Staphylococcus aureus

20. What common mix of gasses are used in modified atmosphere packaging of red meats?
   A. 80% Oxygen, 20% CO₂   B. 60% Oxygen, 40% CO₂   C. 80% Nitrogen, 20% CO₂   D. 60% Nitrogen, 40% CO₂

21. Which of the following is an indicator of carcass muscling in a lamb?
   A. Conformation   B. Hide color   C. Bone density   D. Size of the skeleton

22. How many total essential amino acids does meat contain?
   A. 4   B. 9   C. 2   D. Does not contain amino acids

23. Which program determines which vaccines can be used in animals designated organic?
   A. EPA   B. COOL   C. NOP   D. BQA

24. Which temperature corresponds with a medium degree of doneness in beef?
   A. 145°F   B. 150°F   C. 160°F   D. 170°F

25. Which is not a USDA Grade for Beef?
   A. Select   B. Prime   C. Good   D. Utility

***Don’t forget to use a #2 Pencil! ***