Quiz Bowl Study Guide:

Disclaimer – Questions for the quiz bowl rounds will be age appropriate

General:

- 1. Ohio Beef Checkoff know the amount
- 2. Beef Checkoff program- know who runs it, how it can be used, how much goes to the Cattlemen's Beef Board
- 3. Unites States Secretary of Agriculture (Sonny Perdue)
- 4. COOL (Country of Origin Labeling)- know what it is and how it started
- 5. What country has the largest number of beef cattle? (India)
- 6. Know the British, Continental, and American Breeds
- 7. Know genotype vs. phenotype
- 8. Beef by-products
- 9. What invention in 1873 had a large impact on beef cattle production? (Barbed Wire)
- 10. Flight Zone- what is it?
- 11. Chicago Mercantile Exchange- where most livestock futures are traded
- 12. Name five different careers that you could pursue in the beef industry. Explain, generally, what each of them does.
- 13. Identify several ways to market feeder calves?
- 14. Name five different beef breeds and give two physical or genetic characteristics of each.
- 15.-What is the weight range for an ideal market steer?
- 16. What does NCBA stand for? (National Cattlemen's Beef Association)
- 17. Who is the current president of the Ohio Cattlemen's Association? (Sasha Rittenhouse)
- 18.-Who is the Director of the Ohio Department of Agriculture? (Tim Derickson)
- 19. What type of performance records are most valuable to a commercial producer that sells feeder calves?

Genetics:

- 1. EPDs (Expected Progeny Difference)- know which ones are considered maternal, paternal, and carcass related
- 2. Polled vs. Horned- know which is dominant and which is recessive and the definitions of both
- 3. Parrot and Monkey Mouth-what are they?
- 4. Homozygous vs. Heterozygous genes
- 5. Double Muscling- what is it?
- 6. Give two examples of dominant and recessive gene inheritance found in cattle.
- 7. What is heritability? What is its impact on genetic improvement?
- 8. If a horned cow is mated to a homozygous polled bull, what percentage of the calves will be horned?

Reproduction:

- 1. Average length in days between heat cycles (21 days)
- 2. Sperm cell abnormalities (Double heads, coiled tails, proximal droplets, distal droplet)
- 3. BIF (Beef Improvement Federation)- know who they are and what they do
- 4.—A.I. (Artificial Insemination)
- 5. Know the reproduction tracts in both cows and bulls
- 6. Zygote-know what it is and how it is formed
- 7. Surrogate mother in embryo program (Recipient Cow)
- 8. Dystocia-what is it?
- 9. Lutalyse- what it is and why you would use it
- 10. Clean up bull- what does he do?
- 11. Parturition- what does it refer to?
- 12. FSH (Follicle Stimulating Hormone)
- 13. Estradiol- cannot be legally used for synchronization programs
- 14. Know all of your main hormones
- 15. Breeding soundness exams- what is their purpose and how are they conducted?
- 16. Time between the birth of a calf and when the cow rebreeds (Post-Partum Interval)
- 17. How long is a heifer/cow gestation period? (283 days)
- 18. Why should you look at the records of a calf's parents (sire and dam) before buying it?
- 19. What are the name(s) given to a breeding female?
- 20. What is a good measure of the mothering ability of a cow?
- 21. Name two ways that crossbreeding is beneficial to a breeding program/project.
- 22. A heifer's size is more important than her age when deciding on a breeding time. A heifer should weigh _____ of her mature body weight before the onset of the breeding season?
- 23. List three (3) advantages of artificial insemination.
- 24. List or share two production practices a beef producer can do to avoid calving difficulties in heifers.
- 25.-What is estrous synchronization?
- 26. Describe the benefits of estrous synchronization to a herd.
- 27. How long should you wait after a two-year-old heifer calves to re-breed her?
- 28.-CIDR- what is it used for and what hormone does it release?
- 29. Method is commonly used to determine pregnancy in cows (Rectal palpation)
- 30. Semen-how it is collected and stored

Health:

- 1. Normal body temperature of a beef animal (100.4-103.1)
- 2. Scours-know what it is and the cause
- 3. Bloat- what it is, how it can be detected, and how it can be treated
- 4. Injections- know the types and where they are given
- 5. Parasites- know all of the internal and external ones as well as how to treat them
- 6. White Muscle Disease- how it is caused and treated
- 7. Grass Tetany- how it is caused and treated
- 8. Tetanus-how it is caused and treated. What is the common name for it? (Lockjaw)

- 9. Pneumonia- how it is caused and treated
- 10. Hardware Disease- how it is caused and treated
- 11. BSE (Bovine Spongiform Encephalopathy)- what it is, how it is caused, and where confirmed cases have been found
- 12. Brucellosis- what it is and what causes it
- 13. Zoonotic Diseases- what are they?
- 14. Enterotoxaemia (Overeating)
- 15. Blackleg- what it is and what causes it
- 16. IBR (Infectious Bovine Rhinotracheitis)- what it is and what causes it, also known as Red
- 17. Ricketts- what it is and what causes it
- 18. What does it mean to use disease prevention as a part of a health program?
- 19. What is a withdrawal time as it relates to giving medicine?
- 20.-Name five of the nine items listed on a medication label.
- 21. What is ringworm? Why is it important to wear gloves when treating it?
- 22. What is the function of selenium? What deficiency signs are looked for? How do you provide it in your animal's diet?
- 23. What is extra-label drug usage? When is it allowed? Who can prescribe or order extra-label drug usage?
- 24.-Know when different types of needle gauges would be used
- 25. Why separate new breeding stock from rest of the herd? How long should they be separated?

Classification:

- 1. Scientific name for a cow (Bovine)
- 2. Know both species of beef cattle and what makes them different (Bos Taurus and Bos Indicus)
- 3. Term for a non-lactating cow (Dry)
- 4. Offspring of a cow (Progeny or calf)
- 5. Heifer that is born twin to a bull (Free Martin)
- 6. Calves on grass after weaning but before going to feedlot (Stockers)
- 7. Male parent (Sire)
- 8.—Female parent (Dam)
- 9. Cattle used for milk and beef production (Dual purpose breed)
- 10. What is the difference between a purebred and crossbred animal?
- 11. Name three ways to identify cattle.
- 12. What are frame scores and what are they based on?
- 13. If you are interested in purchasing a herd sire, what information would you use to select him?
- 14. What is the mature weight of a heifer with a frame score of 5?
- 15. What are frame scores and what are they based on?
- 16. What are EID tags?

Anatomy:

- 1. The stomach-know all four compartments and what their purposes are
- 2. Know names of the bones in beef cattle and where they can be found (example there are
- 3.—13 pairs of ribs)
- 4. Know structure problems and terminology for them
- 5. Rumen PH- what the average is in cattle and what upsets of it could cause
- 6. Know the digestive system
- 7. Explain the difference between cow hocked, splayfooted, bowlegged and pigeon toed.

Nutrition:

- 1. What is the most important nutrient for cattle? (Water)
- 2. Know your common forages and feeds
- 3. Know the 5 essential nutrients for cattle
- 4. What is the most abundant mineral in any animal's body? (Calcium)
- 5. Vitamins-water soluble,
- 6. Calorie-measure energy value in feed stuffs
- 7.—Name the major nutrient class found in corn.
- 8. Give two examples of feedstuffs that are high in protein.
- 9. What is the major vitamin that needs supplemented to cattle?
- 10. Know the two different vitamin categories.

Carcass:

- 1.—USDA Quality Grades (Prime, Choice, Select, Standard, Commercial, Utility)
- 2.—USDA Yield Grades (1-5)- know how they are calculated
- 3. Veal-know definition
- 4. Marbling- what it is and why it is important
- 5. Know your cuts of beef
- 6. Know the abnormalities in carcasses
- 7.—Know how to calculate dressing %
- 8. Maturity grades- know what ages go with each grade
- 9. When judging a beef carcass, where is fat thickness measured?
- 10.-Name the two types of grading that are used when grading beef carcasses.

Management:

- 1. Know the definition and process of weaning, dehorning,
- 2. Know how many days of age weaning weights for calves are adjusted for (205)
- 3. When newborn calves should be weighed (within 24 hours after birth)
- 4. Be able to define creep feeding
- 5. Know different types of grazing systems (Example- rotational and continuous)
- 6. Body condition scores (1-9)
- 7. Contemporary Groups-what are they and how are they used?
- 8. Compensatory Growth- what is it?
- 9. What does "free choice" mean? Give an example.

- 10. What care practices should you perform on a calf soon after it is born?
- 11. What is the recommended range in age of calves for calculating the 205-day adjusted weight?
- 12. What is colostrum? Why it is important to the calf?