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 nose
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?