**Please fill out your Scantron with a number 2 pencil only!!**

**Please Circle your answer on this sheet as well as the Scantron!!**

1. How many cows can a beef bull reasonably be expected to breed?
   1. 5 – 10 b. 10 – 15 c. 25 – 35 d. 80 – 90
2. Which market animal has the highest total carcass value?
   1. Steer b. Lamb c. Hog d. Goat
3. Bacteria help cattle and sheep digest fibrous feeds. In which section of the digestive tract is the greatest number of bacteria found?
   1. Rumen b. Abomasum c. Large Intestine d. Liver
4. Which of the following is the top agricultural commodity for the state of Virginia?
   1. Cattle/calves b. Broilers c. Turkeys d. Hogs
5. What hormone is responsible for regression of the corpus luteum if a doe does not become pregnant?
   1. Estrogen b. Testosterone

c. Gonadotropin Releasing Hormone d. Prostaglandin

1. What is a problem that can result from lambs being docked too close to the body?

a. Rectal Prolapse b. Limp when they walk

c. Meat quality is reduced d. Internal parasites

1. Which of the following is not a component of the Beef Quality Assurance (BQA) Program?
   1. Feed and nutrition b. Identification and record-keeping

c. Forage management d. Vaccines and drug practices

1. Which species is seasonally anestrous?
   1. Sheep b. Cattle c. Hogs d. All will show heat year round
2. A pig now weighs 250 pounds. 75 days ago he weighed 100 pounds. He has eaten a total of 600 pounds of feed. What is his feed-to-gain ratio?
   1. 2 b. 4 c. 6 d. 8
3. What is a problem resulting from well-fertilized corn or grass during drought conditions? This problem can kill livestock if they eat silage or hay from these crops.
   1. Magnesium toxicity b. Iron toxicity

c. Selenium toxicity d. Nitrate Toxicity

1. Which breed of sheep is noted for excellent wool quality, but has poor muscling and meat characteristics?
   1. Merino b. Dorset c. Cheviot d. Columbia
2. What is the function of the esophageal groove?
   1. It protects the esophagus against injury from consuming hard stem plants.
   2. It is the structure that causes animals to bloat when it closes for too long.
   3. It allows milk to bypass the rumen of a calf/lamb and go directly to the abomasum.
   4. It is the structure that allows cattle/sheep to regurgitate and chew their cud.
3. In Virginia, what is the most commonly used method of producing feeder cattle without horns?
   1. Barnes dehorner b. Electric dehorner

c. Dehorning paste d. Using polled genetics

1. Which part of the reproductive tract of a female is a barrier to infections and foreign material?
   1. Ovary b. Uterus c. Uterine horns d. Cervix
2. Which type of internal parasite is not controlled with dewormers?
   1. Lungworms b. Coccidia

c. Roundworms d. Tapeworms

1. What is the percent chance a calf is red hided when a F1 Hereford × Angus (black baldy) is bred to a Hereford bull?
   1. 0% b. 25% c. 50% d. 100%
2. A feed is the lowest in digestibility and high in fiber is called what?
   1. Roughage b. Concentrate c. Protein d. Mineral
3. What are the 4 parts of the ruminant stomach in the order in which feed particles pass?
   1. rumen, reticulum, omasum, abomasum
   2. rumen, reticulum, abomasum, omasum
   3. reticulum, omasum, abomasum, rumen
   4. reticulum, rumen, omasum, abomasum
4. Which ewe should have the highest energy requirement?
   1. A bred ewe carrying twin lambs b. A bred ewe carrying a single lamb

c. An open, non-lactating ewe

1. When grading feeder cattle and assessing degree of muscle thickness, the three muscle thickness grades in order from heaviest to lightest muscled are
   1. L, M, S b. 1, 2, 3 c. Prime, Choice, Select d. 3, 2, 1
2. Which disease causes animals to become lame and is passed from animal to animal through the soil?
   1. Founder b. Hairy heel wart c. Arthritis d. Screw claw
3. Farmers often add urea to a corn silage diet. Why?
   1. Increase protein content b. Increase energy content

c. Calcium and phosphorus supplement d. Prevent spoilage

1. The best indicator of pigs that are littermates is what?
   1. They are the same color b. Same notch in the left ear

c. Same notch in the right ear d. They are the same sex

1. The presence of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signifies a mutton carcass.
   1. A break joint b. Excessive fat c. Rounded ribs d. A spool joint
2. Which is the average rectal temperature of beef cattle?
   1. 102.3°F b. 102.5°F c. 101.5°F d. 98.6°F