

Kansas 4-H Sheep Quiz Bowl Manual

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ANATOMY SECTION A

1. What are the nitrogen compounds called which make up proteins?
A: Amino acids
2. Which color blood cells play the biggest role in prevention of disease in an animal?
A: White Blood Cells
3. Substances produced from glands with no ducts that act as chemical messengers in the body are known as _____.
A: Hormones
4. Blood consists of two major components. These are _____ and _____.
A: Blood cells and plasma
5. Body cells are made up primarily of _____.
A: Water
6. When you study the structure of an animal you study its _____.
A: Anatomy
7. The _____ is the primary filtering point in an animal's body.
A: Liver
8. Name two parts of the central nervous system.
A: Brain and spinal cord
9. When discussing the nervous system, the letters "CNS" stand for _____.
A: Central Nervous System
10. The structures that consist of strong fibrous bands that hold muscle and bone together are called _____.
A: Tendons
11. Name the connective tissue that consists of strong fibrous bands that helps connect bone to bone at the joints.
A: Ligaments
12. The area of an animal that is completely encircled by the vertebral column on the top, by the ribs on the sides, and the sternum on the bottom is known as the _____.
A: Thorax or thoracic cavity
13. Name two functions of skin.
A: Temperature regulation, protection of the internal organs
14. One function of bones is to act as a _____ storage site for the body.
A: Mineral
15. Which tissue has the highest water content?
A. Fat
**B. Lean*
C. Bone

16. Name the four compartments of a ruminant's stomach?
A: Rumen, Reticulum, Omasum, Abomasum
17. In a sheep, what is commonly known as the "hardware compartment" in the digestive system?
A: Reticulum
18. In a sheep, which compartment of the stomach has the greatest volume?
A: Rumen
19. How many compartments are there in a lamb's stomach?
A: Four (4)
20. Name the thin membrane that lines the wall of the abdominal cavity.
A: Peritoneum
21. In a baby lamb, what is the name of the groove that allows milk to flow directly into the abomasum?
A: Esophageal groove
22. Name the blood vessel that drains the stomach and intestines and carries blood to the liver.
A: Portal vein
23. Bones grow in length from a cartilaginous area called the _____.
A: Epiphyseal plate
24. Name the vessel that carries blood to the lungs.
A: Pulmonary artery
25. Name three divisions of the small intestine.
A: Duodenum, Jejunum, Ileum
26. Where are the testes located in a cryptorchid ram?
A: Abdominal cavity
27. What is the major function of the scrotum on a ram?
A: To regulate the temperature of the gonad or testicle.
28. Where is the poll located on a sheep?
A: On the top of the head
29. Which portion of a sheep's stomach is most similar to the human stomach?
A: Abomasum (True stomach)
30. Name another term for the reticulum, one of the four compartments of the lamb's stomach?
A: Honeycomb or Hardware collector
31. How many upper incisors does a ewe have?
A: None (A ewe has an upper "pad", but no upper incisors)
32. What anatomical structure in the sheep is comparable to the human knee?
A: Stifle joint
33. What vein in the neck does a veterinarian draw blood from or put in fluids?
A: Jugular

34. The organ that makes urine is called a _____.
A: Kidney
35. The organ that receives the blood from the small intestine first is called the _____.
A: Liver
36. Name the enzyme and acid secreting portion of the ruminant stomach.
A: Abomasum
37. Name the organ in which the embryo develops.
A: Uterus
38. What is the esophagus?
A: The tube from the mouth to the stomach
39. The honeycomb is another name for the _____.
A: Reticulum
40. How many mammary glands does a ewe have?
A: 2
41. When does a ewe lamb usually get her first pair of permanent incisor teeth?
A: 12-15 months of age
42. Where is the stifle?
A: The joint nearest the body on the hind leg
43. The lining of the rumen is made up of what little projections?
A: Papillae
44. Which compartment of the ruminant stomach is known as the fermentation vat?
A: Rumen
45. What is the function of the omasum?
A: Water removal
46. What does the bronchi connect?
A: The lungs to the throat
47. What do we mean by cloven hoof?
A: It is split in two parts
48. Where is a lamb's naval?
A: Midline on the belly

BREEDS AND ASSOCIATIONS

SECTION B

1. What does the abbreviation K.L.A. stand for?
A: Kansas Livestock Association
2. What do the initials U.S.D.A. stand for?
A: United States Department of Agriculture
3. What do the initials F.D.A. stand for?
A: Food and Drug Administration
4. What do the letters A.S.I. stand for?
A: American Sheep Industry
5. What do the letters N.S.I.P. stand for?
A: National Sheep Improvement Program
6. What was the first breed of sheep to originate in the United States?
A: Columbia
7. Name four breeds of sheep that have originated in the United States.
A: Columbia, Montadale, Polypay, Targhee, Debouillet, Katahdin, Navajo, Panama
8. Where did the Corriedale breed originate?
A: New Zealand
9. Name four breeds of sheep that originated in England.
A: Dorset, Hampshire, Lincoln, Oxford, Shropshire, Southdown, Suffolk, Border Leicester, Chun Forest, Cotswold, Romney
10. Where did the Cheviot breed originate?
A: Scotland
11. Where did the Finnsheep breed originate?
A: Finland
12. What breeds were involved in the development of the Columbia breed?
A: Lincoln and Rambouillet
13. What breeds were involved in the development of the Hampshire breed?
A: Southdown, Wiltshire Horn and Berkshire Knot
14. What breeds were involved in the development of the Montadale breed?
A: Cheviot and Columbia
15. What breeds were involved in the development of the Oxford breed?
A: Hampshire and Cotswold
16. What breeds were involved in the development of the Polypay breed?
A: Targhee, Dorset, Rambouillet and Finnsheep

17. What breeds were involved in the development of the Suffolk breed?
A: Southdown and Norfolk
18. What breeds were involved in the development of the Targhee breed?
A: Rambouillet, Columbia and Corriedale
19. This classification of sheep breeds includes generally the white-faced breeds of fine-wool type, the breeds primarily from crosses of fine-wool and long-wool types and highly prolific breeds:
A. Ram breeds
B. Dual purpose breeds
**C. Ewe breeds*
20. This classification of sheep breeds includes meat-type breeds used primarily as terminal sires for market lamb production.
**A. Ram breeds*
B. Dual purpose breeds
C. Ewe breeds
21. Which breed of sheep found in the United States today originated in North Africa?
A: Tunis
22. Which breed of sheep renowned for its fine quality wool production originated in Spain?
A: Merino
23. Give an example of a hair sheep breed found in the United States today.
A: Barbados, Katahdin, St. Croix
24. Name a sheep breed found in the United States that originated in the U.S.S.R.
A: Karakul, Romanov
25. What breed of sheep originated in the Netherlands and was first imported into the United States in the 1980's?
A: Texel

BREEDING AND GENETICS

SECTION C

1. A first generation crossbred lamb is known as a _____.
A: F1 cross
2. What is the term used to describe the taking of measurements of economically important traits in the live animal?
A: Performance testing
3. Sheep have how many pairs of chromosomes on each cell?
A: 27
4. Name a term used to describe a genetic combination where both genes are dominant or both genes are recessive.
A: Homozygous
5. Explain what is meant when you have a correlation value of "0" for two selected traits.
A: Selecting for one trait will have absolutely no effect on the other selected trait.
6. Name the process by which body cells divide and every cell from that division is identical.
A: Mitosis
7. If a lamb is heterozygous in its genetic makeup for a specific trait, what is the term used to describe the gene that causes the lamb's phenotype for that trait?
A: Dominant gene
8. Explain why more genetic progress can be made in a herd through selection of the ram versus the ewes.
A: A ram will sire multiple progeny each year; whereas, a ewe in a normal breeding program can only give birth to a few lambs each year.
9. What will the sex of a lamb carrying a combination of the XY sex chromosomes be?
A: Male
10. What is the term used to describe a genotype in which the heterozygous individual is superior to either the homozygous dominant or the homozygous recessive individual?
A: Overdominance
11. Name the biggest disadvantage associated with using progeny performance data for selecting herd sires.
A: Length of time needed to gather data results in loss of production time.
12. What is the term used to describe a trait that is determined by a gene carried on the X sex chromosome.
A: Sex linked characteristic or trait
13. Name the process by which germ cells divide and the resulting cells have only 1/2 the normal number of chromosomes.
A: Meiosis

14. An individual's genotype is determined at _____.
- A. Birth
 - B. Slaughter
 - *C. Conception
15. What is the term used to describe a mating system in which closely related ancestors are mated back to back to each other to increase the concentration of desirable and/or undesirable genes?
- A: *Inbreeding*
16. Does the sire or the dam contribute the Y chromosome to a ram lamb?
- A: *Sire*
17. An abnormality that is present in an individual at the time of birth is termed _____.
- A: *Congenital*
18. The structures in the cells that carry the genetic material are _____.
- A: *Chromosomes*
19. Fertility will _____ in sheep that have been inbred extensively.
- A. Increase
 - B. Stay the same
 - * C. Decrease
20. If a ram that is heterozygous for spider lamb syndrome is mated to a ewe that is heterozygous for spider lamb syndrome, what proportion of their offspring will be spider lambs?
- A: *25%*
21. Superior performance in a trait be crossbred progeny over and above the average performance of their straight bred parents is termed _____.
- A: *Heterosis or hybrid vigor*
22. What is the proper term used to describe genetic changes, such as changes in certain horned breeds that causes their descendants to be polled?
- A: *Mutations*
23. What is the term used to describe a specific trait that can only be seen in either males or females, but not in both sexes of a species?
- A: *Sex linked characteristic*
24. If a person refers to the "top side" of an animal's pedigree, they are referring to which side?
- A: *Paternal*
25. Of the total number of chromosomes found in any lamb's body cell, what proportion are maternal?
- A: *One half*
26. As a ram matures and increases in size he will sire lambs with _____ birth weights.
- A. Heavier
 - B. Lighter
 - *C. The same

27. If a lamb is heterozygous in its genetic makeup for a specific trait, what is the term used for the gene that does not show up in the lamb's phenotype for that trait?
A: Recessive gene
28. What is the term used to describe a genetic combination of one dominant and one recessive gene?
A: Heterozygous
29. What is the term used to describe a specific animal's ancestry or lineage?
A: Pedigree
30. What is the term used to describe a mating system which involves mating unrelated families within the same breed?
A: Outbreeding
31. A characteristic of an animal that can be seen and/or measured such as color, weight, wool length is called _____.
A: Phenotype
32. The term used to describe the superiority of parent stock compared to the average of the herd from which they were selected is _____.
A: Selection differential
33. What is the term used to describe a mating system where 2, 3 or more breeds are combined?
A: Crossbreeding
34. Which one of the following is a mating system which concentrates the inheritance of one or more outstanding ancestors?
A. Outbreeding
**B. Linebreeding*
C. Backcross
D. Crisscross
35. Which one of the following terms is used to describe the actual genetic makeup of an individual?
A. Prototype
B. Karyotype
**C. Genotype*
D. Phenotype
36. What does E.P.D. stand for in sire evaluation systems?
A: Expected Progeny Difference
37. What does a trait ratio of 112 mean?
A: The animal is 12% above the average in that trait
38. How is percent lamb crop weaned per ewe exposed calculated?
A: Lambs weaned divided by the number of ewes exposed to rams multiplied by 100.
39. What are half-sibs?
A: Lambs having the same sire or dam
40. Define contemporary group
A: A group of animals of similar age, sex and management

41. What two factors determine an animal's performance?
A: Genetics and environment
42. Which of the following would be the most accurate basis for selecting herd sires to increase growth rate?
A. Pedigree
B. Visual appraisal
C. Individual performance records
**D. Progeny performance records*
43. Traits that are _____ in heritability normally show the greatest response in crossbreeding.
**A. Low*
B. Medium
C. High
44. What is the paper called that lists the sire and dam of a purebred animal?
A: Registration paper
45. Why is it hard to recognize an animal that is a carrier of a recessive gene?
A: There is no difference in appearance of an animal that carries two dominant genes for a trait versus an animal that carries one dominant and one recessive gene for that same trait.
46. All inherited characteristics are contained in the fertilized _____.
A: Egg
47. In general reproductive traits are _____ in heritability.
A. High
B. Medium
**C. Low*
48. Reproductive efficiency equals the number of _____ per ewe in the breeding flock.
A: Lambs weaned
49. Chromosomes and genes come in _____.
A: Pairs
50. Entropion is a _____ trait.
A: Heritable
51. Sheep have _____ chromosomes.
A: 54 or 27 pairs
52. The heritability estimate for multiple birth is _____.
** A. Low*
B. Medium
C. High
53. Name two examples of jaw defects.
A: Overshot, undershot, monkey mouth, parrot mouth

54. Inbreeding usually _____ the likelihood that an undesirable recessive trait will show up in the flock.
A. *Reduces*
B. *Doesn't change*
*C. *Increases*
55. What do the letters F.E.P.D. stand for?
A: *Flock Expected Progeny Difference*
56. What are a ram's progeny?
A: *His offspring*
57. What do the letters E.B.V. stand for?
A: *Estimated breeding value*

EVALUATION SECTION D

1. A long toe on a lamb's foot accentuates a weakness in what part of the leg?
A: Pastern
2. What term is used to describe an animal that has too much set to the hock joint as viewed from the side?
A: Sickle-hocked
3. The general term used to describe the way a lamb is built is commonly referred to as _____.
A: Conformation
4. When a ewe stands with her hocks close together when viewing her from behind, she is said to be _____.
A: Cowhocked
5. Name a condition in sheep, when viewed from the front, the hooves turn out in opposite directions from each other.
A: Splay footed
6. What is the term that is used to describe the internal dimension on sheep through the thoracic and abdominal cavity?
A: Capacity or volume
7. When viewing a lamb from the rear, what should you look for to get a good indication of total carcass muscle?
A: Thickness and width through the stifle area
8. When evaluating a lamb, if it has a very square blocky appearance down his topline, it is an indication of _____.
A: Condition or fat
9. When evaluating live sheep, what does spring and depth of rib indicate?
A: Amount of internal capacity
10. The area on a lamb's leg between the dewclaw and the hoof that should be set at a 45 degree angle is known as the _____.
A: Pastern
11. When viewed from the front, a condition in sheep where the hooves turn in toward each other is known as _____.
A: Pigeon toed
12. A lamb with .20 inches of fat thickness is considered to be _____.
A. Overdone with excess fat thickness
**B. Relatively trim with high cutability*
C. Underdone and in need of a longer feeding period
13. The horny growths on the legs of sheep located just above the hooves are known as _____.
A: Dewclaws

14. Will a lamb normally have more condition over his forerib or rear rib? Why?
A: Forerib, because sheep normally fatten through their forequarter first

HEALTH SECTION E

1. A bone disease in young animals where there is weak and faulty bone formation because they did not receive enough Vitamin D is known as _____.
A: Rickets
2. The blood condition in which the number of red blood cells is decreased below normal because of a deficiency of iron in the diet is called _____.
A: Anemia
3. When a ewe eats stunted or frosted grain sorghum it can result in a disease which interferes with the utilization of oxygen by the body tissues. This disease is known as _____.
A: Prussic Acid Poisoning
4. Which of the following is a condition in sheep that can occur if an animal happens to ingest some sharp metal object and that object punctures the digestive tract causing peritonitis?
A. Vibriosis
**B. Hardware Disease*
C. Rumenitis
D. Brucellosis
5. A profusion of water feces is known as _____.
A: Diarrhea or scours
6. To prevent infections, a newborn lamb should have its navel dipped in what solution?
A: Iodine
7. Arthritis in animals is an inflammation of the _____.
A: Joints
8. Eating moldy hay or clover can result in a disease condition known as sweet clover disease in which the major symptoms are _____.
A: Internal and external hemorrhaging
9. Club lamb fungus is considered a zoonotic disease. This means that _____.
A: It is transmitted from animals to people
10. What disease is caused by an organism commonly found in rivers, lakes, ponds and sewage?
A: Leptospirosis
11. Warts are caused by which of the following:
**A. Virus*
B. Bacteria
C. Fungus
D. Genetic makeup of the animal
12. What happens when a pregnant ewe is infected by leptospirosis?
A: She aborts

13. What is a serious lamb disease caused by a protozoa that is also common in poultry?
A: Coccidiosis
14. Overeating disease is more properly known as _____.
A: Enterotoxemia
15. What type of organism causes ringworm?
A: Fungus
16. What is a common name for Tetanus?
A: Lockjaw
17. Name two reasons scours occur in lambs.
A: Overeating, bacterial infection, viral infection, parasites
18. What is the broad name used to describe udder infections in ewes?
A: Mastitis
19. Name a disease that may or may not cause problems in swine, but usually causes death in sheep.
A: Pseudorabies
20. If a veterinarian makes a ewe swallow a magnet, what disease is he attempting to treat?
A: Hardware disease
21. Grass tetany is a sign of what kind of mineral deficiency?
A: Magnesium
22. Name a disease that is also known as Wool Sorter's Disease.
A: Anthrax
23. What kind of injection is IM?
A: Intramuscular
24. What kind of injection is IV?
A: Intravenous
25. Where should IM injections be given?
A: In the muscles of the neck or muscles between the ribs
26. What kind of injection is SQ?
A: Subcutaneous or under the skin
27. Where should SQ injections be given?
A: Under the skin in the axillary region, under the skin along the ribs or under the skin in the neck.
28. The major cause of deaths in newborn lambs is _____.
A: Starvation
29. Describe Clip, Drip, Strip and Sip.
A: As soon after birth as possible clip the navel of the newborn, dip the navel in 7% iodine, strip the ewe's teats to insure that they are open and make sure the lamb gets a sip of colostrum.

30. Describe a hypothermic lamb. (Must get 2 of 3)
A: Listless, cold to the touch, temperature below 101 degrees F
31. Toxoplasmosis is caused by a _____.
A. Bacteria
B. Virus
**C. Protozoa*
D. Fungus
32. What young animal is often responsible for infecting sheep with Toxoplasmosis?
A: Kittens
33. Why is epididymitis more common in the western states?
A: Because of the use of large numbers of rams in a group
34. What part of the lamb is affected by septicemia?
A: The bloodstream
35. How can septicemia be prevented in baby lambs?
A: By disinfecting the navel
36. What part of an animal is affected by peritonitis?
A: Abdominal cavity
37. How can peritonitis be prevented in baby lambs?
A: By disinfecting the navel
38. At what age are lambs most often affected by E. coli scours?
A: 1-3 days
39. What are the most effective ways in which to treat E. coli scours? (Name 2 of 3)
A: Immediate rehydration (Given IV if warranted), keeping the lamb warm, appropriate antibiotic
40. What is the most effective navel disinfectant?
A: 7% Iodine
41. When should 7% iodine be applied to the navel?
A: At birth
42. What are the protective proteins in colostrum called?
A: Antibodies
43. Why is it important that a lamb receive colostrum during its first 12 hours of life?
A: Antibodies will no longer pass through the intestinal tract and into the blood after 12 hours, they will be digested and treated like all other proteins in the animals diet
44. Why must lambs receive colostrum antibodies?
A: Lambs are born immunodeficient, the only way that they can be protected from the viruses and bacteria in their environment is via the absorption of the antibodies in colostrum
45. Enterotoxemia is caused by what group of organisms?
A: Clostridial bacteria

46. Is there any effective treatment for Clostridial infections?
A: Yes, if the infection is noted in its earliest stage and treatment is initiated immediately
47. Why is treatment of Clostridial infections difficult?
A: Because of the rapid progression of the disease
48. What is the most effective preventative measures recommended to control Enterotoxemia?
A: Vaccination of the ewe 30 days prior to lambing. Be sure lambs receive ample colostrum. Booster vaccinate lambs prior to placing on full grain diet.
49. What are the earliest clinical signs of tetanus?
A: Stiffness of the limbs, stilted gait
50. Which of the following procedures is most likely to happen before a case of tetanus?
A. Castration with a knife
**B. Castration and tail docking with a rubber band*
C. Tail docking with a hot iron
51. Is treatment with successful recovery realistic when dealing with tetanus?
A: No
52. What is the best method to prevent tetanus?
A: Vaccination of the ewe 30 days prior to lambing. Be sure lambs receive ample colostrum. Booster vaccinate lambs at 3-4 weeks of age.
53. What is another name for ORF?
A: Soremouth or Ecthyma
54. Soremouth scabs are infectious, what is the best method of disposing of them?
A: Burning or disposal in a container where no animals will come in contact with them. You should wear gloves when working with sheep infected with soremouth and wash thoroughly when done.
55. What is another name for Chlamydia arthritis?
A: Polyarthritis or Stiff Lamb disease
56. White Muscle disease is caused by a deficiency of _____.
A: Vitamin E and/or Selenium
57. What part of the sheep is affected by upper respiratory infections?
A: Nasal area
58. Lower respiratory infections occur in what parts of the sheep?
A: Lungs and bronchi
59. What is the common aftermath of acidosis?
A: Death, founder
60. What do the letters E.A.E. stand for?
A: Enzootic Abortion of Ewes
61. Give a common name for E.A.E.
A: Chlamydia

62. Referring to rams, what does B.S.E. stand for?
A: Breeding soundness examination
63. How are susceptible ewes exposed to Chlamydia?
A: They ingest the organism by licking an aborted fetus or eating contaminated feed
64. What sheep abortion diseases can also cause human infections?
A: Chlamydia, Toxoplasmosis, Salmonellosis, Listeriosis
65. Name three sheep abortion diseases.
A: Chlamydia, Toxoplasmosis, Salmonellosis, Listeriosis, Vibriosis, Brucellosis, Leptospirosis
66. What is the protrusion of the vagina of a ewe called?
A: Vaginal prolapse
67. What problem is caused when ewes have a vaginal prolapse in the late stages of pregnancy?
A: When the vagina is prolapsed the cervix is unable to dilate normally, when the vulva is sewn so that the vagina can no longer prolapse the lambs are unable to be delivered without the removal of the sutures
68. Ketosis or pregnancy toxemia occurs in what term of gestation?
A: Last trimester
69. Hypocalcemia is symptomatic of what blood deficiency in pregnant and lactating ewes?
A: Calcium
70. What feed or mineral supplement should be provided to help prevent the problem of retained placenta?
A: Selenium
71. Name a viral disease in which the first signs observed are an increased body temperature and swollen ears and muzzle.
A: Bluetongue
72. What is a slow progressive disease of the central nervous system which requires necropsy and dissection of the brain to properly diagnose?
A: Scrapie
73. U.S.D.A. has an eradication program for the elimination of _____.
A: Scrapie
74. What animals intestinal tract is infected with toxoplasmosis?
A: Cats. This makes them a possible carrier of the disease to sheep and humans
75. The letters O.P.P. stand for _____.
A: Ovine Progressive Pneumonia
76. Ovine Progressive Pneumonia is caused by a _____.
A. Bacteria
B. Protozoa
**C. Virus*
D. Fungus

77. Footvax is a vaccine developed for help in control of _____.
A: Contagious Footrot
78. Routine foot trimming may be used to help control and identify_____.
A: Footrot
79. Uterine prolapse describes what condition?
A: The expulsion of the uterus through the birth canal to the outside of the body after delivery of the newborn.
80. Name the vitamin and mineral deficiency that causes white muscle disease.
A: Vitamin E, Mineral-Selenium
81. If you are vaccinating for overeating you will use _____.
A: Clostridial perfringens type C and D
82. Name a substance that may be used in a foot bath to help prevent footrot.
A: Zinc sulfate, formaldehyde, copper sulfate (last resort)
83. Name a neurological disease with a long incubation period.
A: Scrapie
84. Name a condition of the abdomen that sometimes develops after an extended case of kidney stones.
A: Water belly
85. Sheep that walk in a circle should be suspected of having what disease?
A: Listeriosis, encephalitis, circling disease, rabies
86. A rigid saw-horse like stance, stiffness and contracted muscles are typical of what common disease?
A: Tetanus or lockjaw
87. _____ is a disease characterized by a hard, swollen udder.
A: Mastitis
88. What viral disease of sheep can be contacted by humans?
A: Soremouth or ovine ecthyma
89. Bluebag is another name for what?
A: Mastitis
90. What drug was cleared in 1984 for use in feedlot lambs for the prevention of coccidiosis?
A: Lasalocid or Bovatec
91. What do you call a disease that develops slowly and runs a prolonged course?
A: Chronic
92. What do you call a large protein molecule produced by the immune system as a result of vaccination or disease which protects the animal from that specific disease?
A: Antibody
93. What do you call a disease which affects only a certain portion of the body?
A: Localized disease

94. Enterotoxemia type C usually affects lambs at what stage of their lives?
A: Within the first few weeks
95. A dreaded respiratory disease in which affected animals become depressed, go off feed, may cough, show some respiratory distress, have an accumulation of nasal exudate and have an accompanying high fever is _____.
A: Pneumonia
96. What is the normal body temperature of a sheep within 1 degree?
A: 102.3
97. What common nutritional disease resulting from improper calcium and/or phosphorus levels ultimately causes rupturing of the bladder of the urethra?
A: Water belly, urinary calculi, urolithiasis, calculosis
98. The *Brucella ovis* organism is responsible for what venereal disease in rams?
A: Epididymitis
99. When ewes are fed too low an energy level in late gestation, what nutritional disease is likely to develop?
A: Ketosis, pregnancy toxemia, twin lamb disease, pregnancy disease, lambing paralysis
100. During what part of a lamb's life do the globulins in colostrum pass most rapidly across the wall of the gut?
A: The first 1-2 hours of life
101. Metritis is the infection of the _____.
A: Uterus
102. If a ewe has mastitis, what type of sample will a veterinarian take to run a culture and sensitivity test on?
A: Milk
103. What is the correct name for a twisted stomach?
A: Displaced abomasum
104. Milk fever is the common name for a condition of hypocalcemia primarily due to the stress of _____.
A: Lactation
105. Name two components found in colostrum that makes it good for the lamb.
A: Antibodies, energy, protein, vitamins
106. How do the antibodies in colostrum get into the lamb's bloodstream?
A: They are absorbed through the intestinal wall without being digested
107. Why must a lamb receive colostrum within the first hours of life?
A: As the gut matures it cannot absorb the antibodies undigested
108. What is a balling gun?
A: Implement used to give sheep pills
109. Zinc sulfate is recommended for the treatment of what disease?
A: Footrot

110. What is one rapid method to relieve a bloated animal?
A: Stomach tube or ruminal incision
111. What is a condition in which there is a build up of gases that are unable to escape the rumen, causing an extension on the left side of the sheep?
A: Bloat
112. Aureomycin is _____.
A: Chlortetracycline
113. Rickets in lambs is caused by a deficiency in what vitamin?
A: Vitamin D
114. What is entropion?
A: Inverted eyelids
115. What happens in nitrate poisoning?
A: Nitrates react, reducing the blood's ability to carry oxygen and the ewe suffers tissue suffocation
116. What disease often develops when a sheep can't belch?
A: Bloat
117. What is pneumonia?
A: Disease of the lungs
118. What is one way to keep lambs from catching pneumonia?
A: Keep them dry and out of drafts
119. What is terramycin?
A: An antibiotic
120. What is an antibiotic?
A: A product that is effective in killing bacteria
121. What is a vaccine?
A: A product that is given to an animal to stimulate the immune system so that the animal is protected from getting the disease.
122. A disease prevalent in sheep grazing rapidly growing legumes and results in a distended rumen is called _____.
A: Bloat

MANAGEMENT SECTION F

1. What do you call a female sheep?
A: Ewe
2. What do you call an intact male sheep?
A: Ram, Buck
3. What do you call a castrated male sheep? Spell your answer.
A: Wether
4. A sheep that is one year old is known as a _____.
A: Yearling
5. The method of fighting among rams is called _____.
A: Butting
6. A cryptorchid is a ram with what characteristics?
A: Failure of one or both testicles to descend into the scrotum
7. What are the advantages for shearing lambs. List 3.
A: Will stay cooler in the summer, will eat better, faster and easier to prepare for show, perform with better feed efficiency
8. In months, what is the approximate normal weaning age of lambs in Kansas?
A: 2-3
9. Other than providing a palatable, nutritious creep feed, what can you do to the creep area to entice usage?
A: Provide a light or heatlamp, keep area dry and bedded
10. ADG on a performance report means _____.
A: Average Daily Gain
11. Comparing rams and wethers, which will have the higher rate of gain?
A: Rams
12. Name two management practices that may be performed prior to lambing which will give the lamb greater exposure to the udder and teats of a ewe.
A: Shearing and crotching
13. A tool used for docking and castrating that crushes and cuts at the same time is called an _____.
A: Emasculator
14. How many lower incisor teeth does a 10-month old lamb have?
A: 4 pair (8 teeth)
15. How many upper incisor teeth does a 10-month old lamb have?
A: None, sheep don't have upper incisors
16. At what age is a ewe likely to be the best milker?
A: 4 years

17. How many permanent teeth does a 2-year old ewe have?
A: 2 paid (4 teeth)
18. What is a gummer ewe?
A: A ewe that has lost all its incisor teeth
19. What are the normal dimensions of a lambing jug ?
A: 4 - 5 foot by 4 - 5 foot
20. What is meant by stanchion grafting a lamb to a ewe?
A: Placing the ewe s head and neck in a set of stocks where she can eat and drink, but must allow lambs to nurse. It usually takes 3-5 days for the ewe to accept the lamb
21. Before what age is it best to dock and castrate a lamb?
A: 2 weeks
22. What is a fairly standard pencil shrink percentage that is deducted from the live weight of lambs hauled a short distance to market?
A. 2%
**B. 4%*
C. 6%
D. 8%
23. Where is the best place for a ewe to lamb?
A: Weather permitting in the pasture otherwise in a clean, dry, well bedded jug
24. Name a tool used for docking and castrating that crushes.
A: Burdizzo
25. What piece of equipment is useful in foot trimming?
A: Tilt cradle
26. Name three methods of identification of sheep.
A: Ear tags, ear notching, tattooing, paint branding, electronic microchips
27. What are two benefits of creep feeding?
A: Increased weaning weights, reducing weaning stress, lambs will be bunk broke at weaning
28. Give three good reasons for culling a ewe.
A: Poor performance by her offspring, bad mouth, bad feet, not pregnant, poor udder
29. What is the process in which the testicles of ram lambs are removed?
A: Castration
30. Loss of weight during shipping is called _____.
A: Shrink
31. Will sheep eat more or less than normal on a hot summer day?
A: Less
32. Underfeeding ewe lambs during their first year of life will _____ their first breeding.
A: Delay

33. What is the first requirement necessary to carryout a constructive flock improvement program?
A: Complete identification of all animals
34. What is the National Sheep Improvement Program?
A: A genetic evaluation system
35. What do F.E.P.D. s do?
A: Predict performance differences of lambs sired by different rams, they do not predict actual performances. They compare sheep born in different years, sheep of different sexes and under different management considerations.
36. Name two things that F.E.P.D. s do not adjust for.
A: Incorrect data, preferential treatment of individual lambs, incorrect pedigrees
37. Name two things you must know in order to calculate an adjusted 60 day weight for a lamb.
A: Dam s age, lamb s age at weighing, lamb s weight at weighing, lamb s status at birth and how it was raised, sex of the lamb
38. The adjusted weights of all lambs raised by one ewe is _____.
A: A good indicator of the milking ability of that ewe
39. What factors are involved in determining a contemporary group for lamb s at weaning?
A: Contemporary groups are lambs of the same age and sex, raised under the same management considerations
40. How do you figure a 60 day adjusted weaning weight for a lamb?
A: $\frac{\text{Actual Weight}}{\text{Actual Age}} \times 60 \times \text{Adjustment Factor}$
41. Why is there no adjustment factor for a ewe that is 4 yearsold?
A: Because the ewe is at the optimum age for milk production or mothering ability so no compensation factor is needed

MEATS SECTION G

1. A crown roast of lamb comes from what wholesale cut?
A: Rib or rack
2. Which part of a lamb carcass should make up the largest percent of the lamb?
A: Leg
3. How many calories does a 3 oz. roasted and trimmed serving of lamb contain?
A: 176
4. About how many pounds of live lamb does it take to equal 1 pound of boneless, trimmed retail cuts?
A. 1.1
B. 2.2
**C. 3.3*
D. 4.4
5. External fat thickness of a lamb carcass is measured over the ribeye muscle between which ribs?
A: 12th and 13th
6. Why do many in the sheep industry want to be paid on the basis of their yield grade?
A: Yield grade is one method in which producers can be paid a premium for lean rather than fat
7. Which of the following lambs is likely to have the highest dressing percentage? A lamb with:
A. .1 inch fat
B. .2 inch fat
C. .3 inch fat
**D. .4 inch fat*
8. A blade chop comes from which wholesale cut on the lamb carcass?
A: Shoulder
9. Traditionally speaking, which of the following has been the least important in establishing the sale price on a group of commercial slaughter lambs?
A. Live weight
**B. Amount of muscle*
C. Fat covering
D. Dressing percentage
10. How many ribs do lambs have?
A: 13 or 14 pairs
11. List the four major primal cuts of lamb.
A: Leg, loin, rack, shoulder
12. What is the approximate per capita consumption of lamb in the United States?
A: 1.7 lbs of carcass weight or 1.5 lbs of retail weight

13. Which of the following is the largest wholesale and retail cut in the lamb carcass?
A. Loin
**B. Leg*
C. Rack
D. Shoulder
14. What USDA yield grade would imply an extremely trim carcass?
A. USDA Yield Grade 5
B. USDA Yield Grade 3
**C. USDA Yield Grade 1*
15. Which of the following are three major factors used to determine lamb quality grade?
A. Fat cover, loin eye area, kidney and pelvic fat
**B. Conformation, flank streaking, maturity*
C. Flavor, palatability, tenderness
16. Which of the following will have a low dressing percentage?
A. Lambs that are full
B. Lightweight, unfinished lambs
C. Sheep that are carrying heavy fleece
**D. All of the above*
17. What is the approximate age of a lamb carcass?
A: 2 to 14 months old
18. What fat measurement is commonly used to help determine the total amount of fat in a carcass?
A: Fat thickness at the 12th rib
19. What are the USDA Yield grades for sheep?
A: 1, 2, 3, 4, 5
20. Where is the primary fat measurement usually taken on live sheep?
A: Between the 12th and 13th rib
21. How is a lamb carcass's yield grade calculated?
A: Yield Grade = .4 + (Adjusted 12th rib fat thickness x 10)
22. Name three factors that influence quality grade.
A: Age (maturity), conformation (muscling) and fat streaking
23. What is the normal range for dressing percent of choice lambs?
A: 45% to 58%
24. Which of the following refers to cutability?
**A. Proportion of the meat that is actually saleable at the meat counter*
B. Amount of muscling in the leg
C. How hard the meat is to cut
D. The amount of kidney and pelvic fat
25. An average ribeye area for a 100 lb. lamb would be _____.
A: 1.5 to 3.2 inches

26. Name two primal cuts of sheep found in the hindquarter.
A: Leg and loin
27. The lamb carcass is ribbed between which ribs to determine ribeye size?
A: 12th and 13th ribs
28. What are variety meats?
A: Edible organs and by-products
29. What does it mean to exsanguinate a lamb?
A: Bleed (Remove all the blood)
30. What is K.P. fat?
A: Kidney and pelvic fat
31. What does it mean to eviscerate a lamb?
A: Remove the entrails (guts)
32. The grading system used to estimate the percentage of closely trimmed, boneless retail cuts from the four major primal cuts is called _____.
A: Yield grade
33. What are the quality grades for lambs?
A: Prime, Choice, Good, Utility
34. Which of the following is not a factor in determining USDA sheep carcass yield grades?
A. Conformation grade of the legs
**B. Ribeye area*
C. Percent kidney and pelvic fat
D. None of the above
E. All of the above
35. Which of the following is not a factor in determining USDA sheep carcass quality grades?
A. Conformation
B. Maturity
**C. Carcass weight*
D. Flank fat streaking
36. Name two factors that influence dressing percentage.
A: The mount of fill, degree of finish (fatness), weight of the pelt, muscling
37. Tripe comes from what internal sheep organ?
A: Stomach
38. How many USDA yield grades are there?
A: 5
39. Name the five USDA yield grades in order from the fattest to leanest?
A: USDA 5, USDA 4, USDA 3, USDA 2, USDA 1
40. Name three of the four USDA quality grades of sheep.
A: Prime, Choice, Good, Utility

41. What is the average desirable market weight for slaughter lambs in the United States?
A: 120 - 140 lbs
42. Name the greatest factor in determining the cutability of a lamb.
A: The amount of condition or fat it possesses
43. Name three methods most used for long term meat preservation.
A: Freezing, curing, canning
44. What must happen to meat before it can be USDA graded?
A: It must first pass inspection
45. What is the purpose of meat inspection?
A: Eliminate diseased or contaminated meat from the consumer market
46. What is the term used to describe the proportion of carcass on the rail after slaughter in relation to the live weight?
A: Dressing percent
47. What is the term that refers to the fatness of a lamb?
A: Condition or finish
48. Sheep should be held off of feed for at least how many hours prior to slaughter?
A: 20 to 25 hours

NUTRITION SECTION H

1. What are 2 feed ingredients that can aid in the prevention of urinary calculi?
A: Addition of limestone, ammonium chloride or salt to the ration
2. What mineral is toxic to sheep at doses appropriate for cattle?
A: Copper
3. Selenium and Vitamin E deficiencies can cause what disease?
A: White muscle, stiff lamb
4. What kind of poisoning is associated with the feeding of forage sorghums, corn stalks, oat hay and other cultivated fertilized forages?
A: Nitrate, NO₃
5. Name the four stomach compartments of a sheep.
A: Abomasum, Omasum, Rumen, Reticulum
6. Name three types of protein supplements
A: Soybean meal, Cottonseed meal, Sunflower meal, Linseed meal, Peanut meal, Fish meal
7. What do the letters T.D.N. stand for?
A: Total digestible nutrients
8. What is the first milk from the ewe called?
A: Colostrum
9. In which form do mature feeder lambs least prefer to consume corn?
**A. Finely ground*
B. Cracked
C. Whole
10. The process in which regurgitation, resalivation and reswallowing occurs is called _____.
A: Rumination
11. On which of the following diets will a 90 pound feeder lamb probably gain at the slowest rate in a typical Kansas July?
A. 60% corn
B. 60% wheat
**C. 60% oats*
D. 60% barley
12. What does it mean to creep feed lambs?
A: Provide palatable feed for lambs where the ewes don't have access to it
13. Grains are usually deficient in what mineral needed for growth and development?
A: Calcium
14. Name 3 of the 4 fat soluble vitamins that mature sheep are known to require.
A: A, D, E, and K

15. Name the stomach compartment where fermentation takes place.
A: Rumen
16. What class of drugs is commonly used in starter rations?
A: Antibiotics
17. Briefly explain the difference between the nutritional needs of young versus mature animals.
A: Young animals need additional nutrients for growth, while mature animals just need enough nutrients to maintain body tissues already present
18. If a 2 month old lamb receives a ration containing nutrients over and above his maintenance requirements, the excess nutrients will then go toward _____.
A: Growth
19. Feed efficiency in feedlot lambs is described as pounds of _____ per pound of _____.
A: Feed, gain
20. Balancing ration that contains all necessary nutrients at the proper requirement levels, at minimum cost to the shepherd is known as _____.
A: Least-cost ration formulation
21. Nutrient requirements for the pregnant ewe are highest during which trimester?
A: Last
22. Name 3 high energy concentrates.
A: Corn, milo, barley, oats, wheat
23. Grains are higher in which mineral when compared to forages?
A: Phosphorus
24. Name the primary avenue of water intake, and the primary avenue of water loss in the normal animal.
A: Drinking water and urinary loss
25. The breaking down of feedstuffs by the body is known as _____.
A: Digestion
26. What term describes the amount of feed a sheep will clean up each day?
A: Full feed or ad-libitum
27. Feeds that are high in fiber content and low in energy content are referred to as _____.
A: Roughages
28. Corn is a poor source of what mineral?
A: Calcium
29. What mineral contains sodium and chlorine and is generally fed free choice to sheep?
A: Salt
30. What abundantly available feed grain typically has the highest energy value?
A: Corn

31. What nitrogen-containing compound can be fed to a sheep to meet up to 30% of its protein requirement, but can be toxic at higher levels?
A: Urea
32. What legume hay generally has the highest feeding value for sheep?
A: Alfalfa
33. What is the function of the rumen microbial population?
A: Digest fiber, utilize non-protein nitrogen (NPN)
34. What is one of the best choice of products given orally to supply the necessary energy to a pregnant ewe with signs of pregnancy toxemia?
A: Propylene glycol
35. What percent of their body weight will a lamb typically consume in dry feed each day?
A: 3-5%
36. What mineral is found in abundance in bone meal and limestone?
A: Calcium
37. As a ruminant the sheep bases its diet on what class of feedstuffs?
A: Roughages
38. Name a common feed grain that is high in fiber and used for sheep?
A: Oats
39. Corn is a good source of _____.
A: Energy
40. What is the name of the largest of the four compartments of a sheep's stomach?
A: Rumen
41. Name three of the nutrients required for sheep to maintain their bodies and grow.
A: Protein, energy, vitamins, minerals, water
42. The most limiting nutrient in ewe nutrition is _____.
A: Energy
43. At what stage in the ewe's production cycle is protein the most critical?
A. Open
B. Early gestation
C. Late gestation
**D. Lactation*
44. If a ewe is underfed protein during lactation, what is the likely negative result?
A: She will be a poor milker
45. Increased salt intake requires an increase in the consumption of _____.
A: Water
46. What are two minerals closely interrelated, particularly in the development and maintenance of normal bone structure?
A: Calcium and Phosphorus

47. The levels of which class of nutrients in feeds is largely determined by the level in the soil on which the feeds are grown?
A: Trace minerals
48. Under normal nutritional conditions, when is the ewe likely to weigh the least?
A: Weaning time
49. Excess fatness of replacement ewe lambs between birth and first lambing should be avoided for what major reason?
A: Her future milk production is reduced
50. On a ewe condition scoring system of 0-5, the desired condition score range to maintain the ewe year round is:
A. 1 ½ to 2 ½
**B. 2 ½ to 3 ½*
C. 3 ½ to 4 ½
D. 4 ½ to 5
51. A good quality commercially prepared lamb milk replacer will contain _____% fat and _____% protein.
A: 25-30, 20-25
52. Give one reason why it is recommended to feed orphan lambs cold rather than warm milk replacer.
A: Cold doesn't sour as quickly, lambs consume a smaller amount of cold milk replacer each time they nurse, but they nurse more often
53. The trade name for the product lasalocid, an ionophore which is FDA approved for sheep is _____.
A: Bovatec
54. What do the letters T.D.N. stand for?
A: Total Digestible Nutrients
55. What do the letters A.D.G. stand for?
A: Average Daily Gain
56. What is the name for the rhythmic muscular contractions which occur in the rumen?
A: Peristalsis
57. What is the greatest importance of salt in a livestock ration?
A: Stimulates appetite
58. What are two factors that influence nutrient requirements of an animal?
A: Sex, weight, level of production, nutrient intake, environment
59. What is feed efficiency?
A: The amount of feed it takes for an animal to produce a pound of gain
60. When lambs are maintained on a high concentrate diet, what mineral is more likely deficient?
A: Calcium
61. The raw source of Vitamin A found in a feedstuff is called _____.
A: Carotene

62. Where do sheep store Vitamin A during times of abundant intake?
A: Liver and body fat
63. Rank the five nutrient groups from the one with the highest amount needed in the diet to the one with the lowest amount needed in the diet.
A: Water, energy, protein, minerals, vitamins
64. What is the function of the esophageal groove in a lamb?
A: Allows milk to bypass the rumen and reticulum for digestion in the abomasum
65. Which of the following minerals has been called the master mineral because it is involved in practically all of the metabolic processes in the body?
A. Sodium
B. Iron
**C. Phosphorus*
D. Potassium
66. Define ration.
A: Feed given to an animal over a 24 hour period
67. What mineral is likely to be deficient when sheep are maintained on a high roughage diet?
A: Phosphorus
68. Which of the following would be expected to have the highest protein content?
A. Prairie hay
**B. Alfalfa hay*
C. Wheat straw
D. Sorghum silage
69. Minerals, especially trace minerals such as selenium, are _____ at high levels of intake.
A: Toxic
70. Corn silage, pasture and hay are examples of what type of feed?
A: Roughages
71. Iron, phosphorus, calcium and magnesium are examples of which of the following types of nutrients?
A. Protein
**B. Minerals*
C. Vitamins
D. Energy
72. What are two ways that sheep usually receive adequate quantities of Vitamin D?
A: By synthesizing it in their own bodies during exposure to direct sunlight or from sun cured hay
73. When corn is overfed to lambs not used to concentrates, what is a common result?
A: Acidosis, founder
74. What type of sheep feed is most commonly high in Vitamin A?
A: Green, leafy legume forage

75. What enables sheep to eat and digest the cellulose in hay?
A: Bacteria and other microbes in the rumen
76. What do the letters N.P.N. stand for?
A: Non-protein nitrogen
77. Into what structure does the food pass when it leaves the stomach?
A: Small intestine
78. What is the most practical method you can use to measure a lamb's performance during the feeding period?
A: Weighing him periodically
79. Which basic nutrient is found in the largest quantity in an animal's body?
A: Water
80. What is the primary purpose of chewing food?
A: Break feedstuffs into smaller particles, allowing better contact with the digestive enzymes
81. The specialized system in which food is broken down is called the _____.
A: Digestive tract
82. Flushing can help increase _____ efficiency in a sheep flock.
A: Reproductive
83. As ruminant animals, sheep utilize many plant materials which would otherwise be _____ to humans.
A: Inedible
84. TDN is an indication of the _____ of a feed.
A: Energy value
85. Sheep are ruminant animals while pigs are monogastric animals. Briefly explain the difference.
A: Ruminants have complex, 4 compartment stomachs while monogastrics have simple, 1 compartment stomachs
86. Sunshine and sun-cured hay are good sources for Vitamin _____.
A: Vitamin D
87. Which nutrient serves as the body's built-in cooling system?
A: Water
88. Which nutrient serves as the body's built-in heating system?
A: Energy
89. What do the letters I.U. stand for when applied to vitamins?
A: International Units
90. How much more energy does it take for a lamb to gain a pound of fat than a pound of lean muscle tissue?
A: 2.25 more energy needed for fat tissue gain
91. When added to sheep rations, what is the primary function of molasses?
A: To increase or improve palatability

92. What is a common digestive upset that can occur in sheep if you feed them straight alfalfa hay?
A: Bloat
93. What is the function of the esophagus?
A: Carries or provides a passageway for food from the mouth to the stomach
94. Ruminants have the ability to synthesize the _____ vitamins in the rumen.
A: B-complex
95. The science of all processes which take place when feed is given to animals is called _____.
A: Animal nutrition
96. Skin, hair, hooves and horns are made up primarily of what basic nutrient?
A: Protein
97. The colon is also known as the _____.
A: Large intestine
98. Before formulating a ration you must know _____ and _____.
A: What feedstuffs you have available, the animal's nutrient requirements
99. Explain briefly how rumen bacteria and the ruminant animal can benefit each other in their life cycles.
A: Ruminants provide a home or good environment for bacteria to grow and develop whereas bacteria help ruminants digest fibrous feedstuff and synthesize some nutrients for the animal's use
100. When sheep overeat a concentrate source, or go off feed then overeat when re-exposed to the feed source, a condition can result where there is an upset in the rumen pH. This is known as _____.
A: Lactic acidosis
101. Cleaning out the feed bunk at least once a day will _____.
A: Encourage greater feed intake
102. What is tocopherol?
A. Vitamin A
B. Vitamin B
C. Vitamin C
**D. Vitamin E*
103. What is ascorbic acid?
A. Vitamin A
B. Vitamin B
**C. Vitamin C*
D. Vitamin D
104. Why is salt iodized?
A: To supply iodine which helps control goiter, a condition of the thyroid.

105. Why is it important to change a sheep's ration slowly?
A: To give the rumen bacteria time to adapt to a new feed
106. Molasses is a good source of _____ and is used in many feeds to increase palatability.
A: Energy
107. The energy remaining after digestive losses, gas losses, urinary losses and the work of digestion are deducted is called which of the following?
**A. Gross energy
B. Net energy
C. Metabolizable energy*
108. Of the five basic nutrient groups, which is the cheapest in almost all cases?
A: Water
109. Are bacteria or protozoa usually present in the rumen in greater numbers?
A: Bacteria
110. Why is it important that the newborn lamb receive colostrum milk?
A: To provide antibodies for immunity from disease. To provide Vitamin A.
111. What happens when milk first gets into the abomasum?
A: It coagulates, glabbers, or clots like cottage cheese
112. What kind of gas is produced in the rumen?
A: Methane, carbon dioxide
113. The organ which secretes digestive enzymes into the small intestine is called the _____.
A: Pancreas
114. How can you tell when the rumen is contracting?
A: Watch the flank, in front of the left hook, listen at the left flank
115. When a lamb nurses, into which compartment of the stomach does the milk enter?
A: Abomasum
116. Define a balanced ration.
A: A ration which furnished all the nutrients in the proper amount and proportion to properly nourish an animal for 24 hours
117. Which intestine comes first?
A: Small intestine
118. When a ewe belches, where does the gas go?
A: 80% goes into the lungs to be exhaled, 2% goes out the mouth directly
119. What is a cud?
A: The feed the ewe has brought up from the rumen and is re-chewing
120. Where does the lamb get the organisms that live in its stomach?
A: From touching the mouths of other sheep

121. What does urea substitute for in the diet?
A: Protein
122. The first milk from a ewe following parturition is called _____.
A: Colostrum
123. What nutrient if left out of the diet will cause death first?
A: Water
124. What is ruminating?
A: Chewing the cud
125. Which is fermented in the rumen first, hay or corn?
A: Corn
126. What is the primary reason for considering urea as a nitrogen source in ruminant rations?
A: Cost
127. Roughages are _____ in fiber and _____ in energy compared to concentrates.
A: Higher, lower
128. List 4 macro minerals required by sheep.
A: Calcium, phosphorus, magnesium, chloride, potassium, sulfur, sodium
129. List 4 micro minerals required by sheep.
A: Iron, manganese, zinc, cobalt, iodine, selenium, molybdenum
130. List 2 specific functions of rumen microorganisms.
A: Convert cellulose materials into digestible products; synthesis of B vitamins; synthesis of vitamin K; convert NPN to bacterial protein; produce unidentified factors essential for growth, fattening and reproduction
131. Is a newborn lamb a functioning ruminant?
A: No
132. Why can a sheep utilize urea and other non-protein nitrogen compounds as a protein source?
A: Because the rumen microorganisms convert NPN into microbial protein which is then used by the sheep
133. Name 3 functions of water in the body.
A: A medium to transport nutrient, to carry waste products to the point of excretion, to cool the body at high environmental temperature, functions as a universal solvent, serves as a fluid which lubricates joints, serves as a fluid base for milk, substrate for metabolic reactions
134. When a ewe reswallows her cud where does it go?
A: Rumen
135. What is the primary advantage of a ruminant over a simple stomach animal with respect to diet?
A: Ruminants can obtain much of their nutrients directly from roughages not directly convertible into food for human use, thereby not competing with man for food supplies
136. What good is protein in the diet?
A: It is used to build muscle or milk protein

137. What term is applied to the total energy contained in a feedstuff?
A: Gross energy
138. What lives in the rumen that digests food?
A: Bacteria and Protozoa
139. In feeding sheep, the nutrient requirements are outlined in a N.R.C. publication. What do the initials N.R.C. stand for?
A: National Research Council
140. What does protein solubility refer to?
A: The ability of protein in a feed to dissolve in a liquid
141. Which is more digestible, very mature hay or corn?
A: Corn
142. Name a major volatile fatty acid produced in the rumen.
A: Acetic, propionic, butyric
143. The primary digestive activity that occurs in a sheep rumen is
A. Water absorption
B. Mineral absorption
**C. Feedstuff fermentation*
D. Absorption of nutrients

PARASITES SECTION I

1. Live flukes affect the _____ of the liver.
A: Bile ducts
2. Which internal parasite that also infects dogs can be grown to lengths of three feet in sheep?
A: Tapeworm
3. What is bottle jaw in sheep an indication of?
A: Severe internal parasite infestation
4. Internal parasites are more likely to be a problem under _____ weather conditions.
A. Dry
**B. Wet*
C. Doesn't matter
5. The barber-pole worm feeds on the lining of which stomach compartment?
A: Abomasum or true stomach
6. Which internal parasite infestation is most commonly associated with scouring in lambs under stress?
A: Coccidiosis
7. What is a disease of lambs characterized by dark diarrhea?
A: Coccidiosis
8. Name a disease caused by a mite that has now been eradicated in this country.
A: Psoroptic mange, scabies, sheep scab
9. What is another name for the stomach worm *Haemonchus contortus*?
A: Barber pole worm
10. Feed or hay that is contaminated with cat feces may cause what disease that can result in abortion?
A: Toxoplasmosis
11. A sheep ked may also be referred to as a what?
A: Tick
12. What is an anthelmintic ?
A: A compound for deworming
13. Give an example of an obligatory parasite.
A: Screwworm, maggot
14. Stomach worms can cause which of the following symptoms?
A. Anemia
B. Diarrhea
C. Rough hair coat
D. Slow rate of gain
E. None of these
**F. All of these*

15. What is the best prevention for flies?
A: Sanitation
16. Name three methods for giving wormers.
A: Bolus, drench, feed additive, paste, gel, injection, drinking water, mineral (block or salt)
17. What is a maggot?
A: Immature or larval stage of a fly
18. Face flies and horn flies develop as maggots in which of the following compounds?
**A. Freshly deposited sheep manure*
B. Rotting grass clippings
C. Rotting or fermenting hay

PHYSIOLOGY AND ENDOCRINOLOGY SECTION J

1. Name the master gland controlling the estrous cycle.
A: Pituitary
2. Which ovarian hormone appears to be involved in the development of the duct system of the mammary gland?
A: Estrogen
3. Frightening a ewe will cause the release of what hormone?
A: Adrenalin, norepinephrine
4. The hormone responsible for interfering with milk ejection is _____.
A: Adrenalin, norepinephrine
5. Which hormone is the one responsible for the ejection of milk?
A: Oxytocin
6. Name two hormones produced by the ovary.
A: Estrogen, Progesterone
7. What is the male hormone called?
A: Testosterone
8. What is the term used to describe the taking of oxygen from the atmosphere, and then the release of carbon dioxide back into the atmosphere by an animal?
A: Respiration
9. What role does the hormone vasopressin (ADH) have?
A: Water reabsorption from the kidney back into the body
10. Blood consists primarily of _____.
A: Water
11. Insulin is produced by the _____.
A: Pancreas
12. The nitrogenous waste product that is secreted by the kidney is called _____.
A: Urea
13. The pH of the abomasum of a ruminant is very _____.
**A. Acidic*
B. Alkaline
14. Hormones are carried in the _____ of an animal.
A: Bloodstream
15. Oxytocin is a hormone secreted from which endocrine gland?
A: Posterior pituitary
16. Estrogen is secreted from which endocrine gland?
A: Ovary

17. Another name for growth hormone is _____.
A: Somatotropin
18. The hormone that moves calcium into bone is called _____.
A: Calcitonin
19. Name the chemical messenger that causes a slightly higher body temperature?
A: Adrenalin, norepinephrine
20. What time of day will an animal have a slightly higher body temperature?
A: Late afternoon
21. When an animal becomes agitated or scared, a hormone known as _____ is released causing increased heart rate, respiration and blood pressure.
A: Adrenalin, norepinephrine
22. The movement of water across cell membranes to a high concentration of salt, in order to dilute that concentration is called _____.
A: Osmosis
23. What are pheromones?
A: Chemical messengers that aid in communication between animals
24. Glucose levels are lower in sheep than in non-ruminants. What do they use for energy?
A: Volatile fatty acids (VFA s)
25. What endocrine gland in the body actually works to control the pituitary gland by sending out specific releasing hormones?
A: Hypothalamus
26. The study of the hormonal system is known as _____.
A: Endocrinology
27. White blood cells are important for _____.
A: Protection against disease
28. _____ is produced by the thyroid gland and works to increase body metabolism.
A: Thyroxin
29. In general, the smaller an animal the _____ its metabolic rate and the _____ its heart rate.
A: Higher, faster
30. Blood carries _____ from the lungs to the body tissues and _____ from the body tissues to the lungs.
A: Oxygen, carbon dioxide
31. The blood in the arteries has a _____ oxygen content than that in the veins.
A: Higher
32. Skin plays an active role in converting sunlight to Vitamin _____.
A: Vitamin D

33. The _____ primary responsibility is to help the body handle short and long term stress.
A: Adrenal glands
34. Younger animals normally have a _____ pulse than older animals.
A: Faster
35. Increased heart rate in an animal will result in _____ blood pressure.
A: Increased
36. The small intestine has a more _____ pH than does the abomasum of a ruminant.
A: Alkaline
37. As blood leaves the heart to go to the rest of the body, that blood will pass through the _____ system first.
A: Arterial
38. When both testicles fail to descent into the scrotum and remain in the body cavity, the male animal is:
A. Fertile and shows normal sexual activity
**B. Infertile and shows normal sexual activity*
C. Fertile and does not show normal sexual activity
D. Infertile and does not show normal sexual activity

REPRODUCTION SECTION K

1. Cryptorchidism describes what condition?
A: A male lamb that is born with one or both testicles still in the abdominal cavity.
2. What is meant by the term flushing the ewe?
A: Increasing the plane of nutrition prior to breeding
3. What is the name of a procedure which is used to determine ram s sexual aggressiveness?
A: Serving capacity test
4. What is the name of the lip-curling reflex exhibited by rams when they smell a ewe in heat?
A: Flehming reflex
5. In sheep, estrus lasts how long?
A: 24 to 36 hours
6. How many days are there between heat or estrous cycles?
A: 16 to 17 days
7. What is the average length of gestation in sheep?
A: 148 days (144 to 150)
8. What is a ewe doing when she is lactating?
A: Producing milk
9. Approximately 70% of fetal growth occurs during what period of gestation?
A: The last 4 weeks
10. Ewes with twin lambs produce _____ more milk than those sucking singles.
A: 20 to 40%
11. What do the letters A.I. stand for?
A: Artificial Insemination
12. What do the letters P.M.S. stand for?
A: Pregnant mare serum
13. What is the function of the sheep s epididymis?
A: Storage and maturation of sperm
14. Prior to the normal birth of a lamb, the _____ must be fully dilated.
A: Cervix
15. The unborn lamb is linked to the placenta by the _____.
A: Umbilical cord, naval
16. Does the ram or the ewe determine how many lambs the ewe will have?
A: Ewe
17. What is the normal presentation of the fetal lamb for delivery?
A: Head between front legs (Diving position)

18. What is a commercially available prostaglandin used to synchronize ewes?
A: Lutalyse
19. A naturally occurring compound used to superovulate donor ewes for embryo transfer is _____.
A: F.S.H. (Follicle stimulating hormone), P.M.S. (Pregnant mare serum)
20. Dystocia is another word for _____.
A: Lambing difficulty
21. Name the reproductive organ in the ram that produces sperm cells.
A: Testes
22. What structure forms on the ewes ovary that contains the egg?
A: Follicle
23. What term is used to describe the length of time from breeding to lambing?
A: Gestation
24. In delivering a lamb that is presenting breech, why should one deliver the lamb quickly after the legs are out?
A: Because the lamb will take its first breath as soon as the umbilical cord breaks and the head may still be in fluid.
25. What is a lamb called during its developmental stay in the uterus?
A: Fetus
26. What is the sac-like tissue that contains the fetus during its development?
A: Placenta
27. What is happening to day length during the time that ewes are generally more reproductively active?
A: Day length is increasing
28. Name two breeds of sheep that are most often considered to be highly prolific.
A: Finnsheep, Booroola Merino, Romanov, Polypay
29. What is accelerated lambing?
A: Lambing more often than once every 12 months
30. How often does the ideal ewe on the Star system lamb in three years?
A: Five times
31. Failure of the cervix to dilate may be caused by a condition called _____.
A: Ringwomb
32. In the sperm cell, the genetic information is contained in which of the following locations?
A. Acrosome or cap
**B. Head*
C. Tail
33. When ewes are in standing heat what are they doing?
A: Standing and letting other ewes or the ram ride her

34. You breed a ewe during her _____ period.
A: Estrus
35. What do the letters E.T. stand for?
A: Embryo transfer
36. Estrous synchronization with prostaglandin works only on _____ ewes.
A: Cycling
37. Which hormone is responsible for male behavior and sex drive?
A: Testosterone
38. What is estrus synchronization?
A: Causing females to express estrus at a predictable time, usually within a period of 1-4 days
39. What hormone is responsible for follicle development on the ovary?
A: F.S.H. (Follicle stimulating hormone)
40. Name three signs of estrus.
A: Standing while being mounted, roughed up wool over tailhead, mud on rumps or hip, swollen wet vulva, restlessness, bleating, fence walking
41. What is the primary function of the uterus?
A: Provides protection and housing for the fertilized egg to develop into a fetus, acts as womb
42. What is the largest of the female reproductive organs?
A: Uterus
43. The common name for the expelled placenta following parturition is _____.
A: Afterbirth
44. What are the primary sex organs of the male and female?
A: Male - testes; female - ovaries
45. What specific structure within the testicles is responsible for the production of sperm?
A: Seminiferous tubules
46. The testicles produce both _____ and _____.
A: Spermatozoa, testosterone
47. What is the practice called that enables an entire flock of females to come into heat within a 1-4 day period?
A: Estrus synchronization
48. What is the function of the hormone relaxin during parturition?
A: To widen the birth canal
49. Odors that signal sexual readiness are caused by chemical messengers known as _____.
A: Pheromones
50. A ram that is able to detect heat but is incapable of settling ewes is called a _____.
A: Gomer, teaser

51. The vulva is the external opening to what part of the reproductive tract?
A: Vulva
52. What structure forms on the ovary and produces progesterone in early pregnancy?
A: Corpus luteum
53. What term is used to describe the sexual behavior or sex drive in rams?
A: Libido
54. The lamb is approximately _____ percent water at birth.
A: 70
55. What enzyme in a lamb's stomach causes milk to form into curds?
A: Rennin
56. What is the endometrium?
A: Layer of the uterus adjacent to the lumen
57. What structure of the ram has the function of regulating the temperature of the gonad or testicles?
A: Scrotum
58. What is the benefit of ultrasonic pregnancy checking in the ewe?
A: By identifying the number of embryos the ewes can be fed according to number of lambs they will have. This will help to prevent the incidence of pregnancy toxemia in ewes carrying multiple lambs.
59. What is the natural barrier in a ewe's reproductive tract through which an artificial insemination rod must be passed before semen is properly deposited?
A: Cervix
60. Sexual receptivity in the female is primarily dependent on high levels of _____.
A: Estrogen
61. Fertilization normally takes place in the _____.
A: Oviduct
62. Prostaglandin is produced by the _____.
A: Uterus
63. The process involving formation of the male gamete is called _____.
A: Spermatogenesis
64. The term describing the release of an egg from the ovary is _____.
A: Ovulation
65. The membranes which enclose the fetus in a fluid filled sac are called the _____.
A: Placenta
66. What is a breech birth?
A: When a lamb is presented tail first
67. What hormone is known as the hormone of pregnancy ?
A: Progesterone

68. What does gestation mean?
A: Period of carrying a lamb, duration of pregnancy
69. What is the thin membranous structure at the end of the oviduct which partially covers the ovary?
A: Fimbria, infundibulum, funnel
70. Prostaglandin can be used as an estrus synchronization agent by performing what action on the ovary?
A: Causes regression of the corpus luteum (CL)
71. The term to describe a difficult lambing is _____.
A: Dystocia
72. During natural mating between a ewe and a ram, semen is deposited in the _____.
A: Vagina
73. The scientific term for the birth process is _____.
A: Parturition
74. What is the sac-like pouch called that is suspended from the ram and houses the testicles?
A: Scrotum
75. The oviduct carries the egg to what part of the ewe's reproductive tract?
A: Uterus
76. The male gonad is the _____.
A: Testicle
77. The female sex cell is called the _____.
A: Egg, ovum
78. Name the hormone that is produced from the ram's testicles.
A: Testosterone
79. Name the structure in the female that serves as a womb.
A: Uterus
80. What primary structure links the fetus to the placenta?
A: Naval, umbilical cord
81. What is meant when it is said that a ewe has failed to clean following lambing?
A: The ewe retains her placenta or afterbirth instead of shedding it as she should have within about 12 hours after birth.
82. How many testicles should a ram have?
A: 2
83. How many sperm cells are actually needed to fertilize an egg?
A: 1
84. Endometritis describes what condition in a ewe?
A: Uterine infection

85. The uniting of the male and female sex cells is called _____.
A: Fertilization
86. The male gamete is called the _____.
A: Sperm cell
87. The eggs are produced by the _____, paired structures in the female reproductive tract.
A: Ovaries
88. Satisfactory sperm production in the ram requires the testicles to be _____ than normal body temperature.
A: Cooler
89. When both testicles fail to descend into the scrotum of a ram, he will retain his _____, but lose his _____.
A: Sex drive, ability to fertilize eggs
90. Name the hormone that triggers growth of a follicle on the female ovary.
A: F.S.H. (Follicle stimulating hormone)
91. The female gonad is the _____.
A: Ovary
92. The unborn animal is nourished through the _____.
A: Placenta via the umbilical cord
93. Name the hormone in the female that triggers ovulation and where it is produced.
A: L.H. (Luteinizing hormone) from the anterior pituitary gland
94. What are two primary factors affecting how easily a ewe lambs?
A: Pelvic size, number of fetuses, size of fetuses, presentation of fetuses, sire selection
95. Total sperm production in yearling rams can be directly related to _____.
A: Scrotal circumference
96. What is the minimum acceptable scrotal circumference for a yearling ram?
A: Centimeters
97. Sperm is produced by what tissue in the testes?
A: Interstitial
98. Name two functions of the female ovary.
A: Production of ova, secretion of hormones
99. Following ovulation, a corpus luteum develops and produces _____.
A: Progesterone
100. An embryo contains _____ water as a percent of the total body weight than an adult animal.
A: More
101. The fetus increases its size about how many times during the last month of pregnancy?
A: Three

102. A fertilized egg is called a _____.
A: Zygote
103. The life of a sperm cell in the female reproductive tract is about _____ times as long as the life of an unfertilized ovum.
A: Five
104. What does the uterus of a pregnant ewe contain?
A: Fetus, unborn lambs
105. Name two hormones produced by the ovary.
A: Estrogen, progesterone
106. What is the period of pregnancy called?
A: Gestation
107. Proestrus, estrus, metestrus and diestrus are stages of the _____ cycle.
A: Estrus
108. What is diestrus?
A: A period when the female is having regular estrus cycles. In the ewe this may be seasonal, due to pregnancy or due to some malfunction of the system.
109. What does the term fertility refer to?
A: Ability to produce young
110. What is the primary female organ of reproduction?
A: Ovary
111. Name two ways that gomer rams may be used.
A: To mark ewes that are in heat, to induce the onset of estrous cycles earlier in the season
112. Name the condition occurring when a ewe expels a fetus prematurely.
A: Abortion
113. If a male sperm bearing the X chromosome fertilizes an egg, what sex will the resulting lamb be?
A: Female

AGRONOMY SECTION L

1. If the recommended stocking rate for a given summer range is .6 AUM (Animal Unit Months) per acre, how many acres of rangeland would be required per animal unit for 3 months of grazing?
A: 5 (# months divided by rating of pasture)
2. How many sheep make up 1 Animal Unit
A: 5 ewes and their offspring
3. A forb is a broad-leafed, herbaceous plant which is commonly referred to as a _____.
A: Weed
4. What is the standard test weight per bushel of milo?
A: 57 pounds per bushel
5. In drought stressed sorghum, what part of the plant will contain the highest amount of nitrate?
A: Stalks (lower 1/3)
6. Hay can be a fire hazard when it is _____ percent moisture.
A: 30-40%
7. What happens when silage or haylage is stored too wet?
 - A. Loses nutrients*
 - B. Improper fermentation*
 - C. Lower palatability*
 - *D. All of the above*
8. What poisonous factor is associated with wilted sweet clover?
A: Dicoumarin
9. When a grain is harvested while still immature and the stalks are chopped and left with the grain allowing the product to ferment, the resulting feedstuff is known as _____.
A: Silage, ensilage
10. Hay is costing \$60 per ton, and is fed at the rate of 5 lbs. per ewe per day. What is the daily feed cost?
 - A. \$.80*
 - B. \$.60*
 - C. \$.30*
 - *D. \$.15*
11. Forage crops are commonly harvested as hay, haylage or silage. One criteria of deciding which class they fit into is dry matter content. Three crops have the following dry matter contents: 55%, 88% and 30%. Which one would be hay, silage and haylage?
A: Hay - 88% dry matter, Silage - 30% dry matter, Haylage - 55% dry matter
12. Dark color and burnt odor are general indicators of what problem in haylage?
A: Heat damage

13. What is the biggest advantage and disadvantage of baling hay in small bales?
A: Advantage - less wastage due to storage losses; Disadvantage - high labor requirement
14. What type of plant is commonly associated with nitrogen fixing bacteria?
A: Legumes (alfalfa, soybeans)
15. Spring top dressing of pasture land refers to what common pasture management practice?
A: Applying fertilizer
16. Mycotoxins come from _____.
A: Mold
17. Applying ammonia fertilizers to the soil increases the level of _____.
A: Nitrogen
18. If you wanted to kill thistles in a fence row you would use which of the following?
A. DDT
**B. 2, 4-D*
C. CMT
D. Copper sulfate
19. The most valuable constituent of manure is _____.
A: Nitrogen
20. What percentage of the primary nutrients in manure are available to crops during the first year after application?
A: 50%
21. Which crop would respond most to the application of manure?
A. Alfalfa
**B. Grass sod*
C. Soybeans
22. Under drought conditions, certain crops may cause prussic acid poisoning. Name a crop you are likely to have this problem with.
A: Sorghum-sudan grass
23. Under what conditions do poisonous plants pose the most problems?
A: When animals are not fed and watered properly; after thirsty animals are watered, they readily eat plants they would otherwise avoid, starving animals will do likewise

WOOL SECTION M

1. A lamb shorn 75 days before going to slaughter is likely to have what type of pelt?
A: Number 1
2. An extremely well-fed ewe flock will produce _____ pounds of wool that is _____ grading than a marginally-fed flock.
A: More, coarser
3. Name the two layers of a sheep skin.
A: Dermis and epidermis
4. Name the two types of follicles that produce wool fibers.
A: Primary and secondary
5. Primary and secondary wool follicles have sebaceous glands. What do they produce?
A: Wax and grease
6. What type of string should be used to tie fleeces?
A: Paper
7. What do you call the entire coat of wool shorn from the sheep at one time?
A: Fleece
8. What do you call purified wool grease?
A: Lanolin
9. What does it mean to skirt a fleece?
A: Remove the stained or inferior wool from it
10. The poorest quality wool is located on the _____ of the sheep.
A: Belly
11. What does carding do for a fleece?
A: Pulls out and straightens the ends of the wool
12. The natural waviness of wool fibers is called _____.
A: Crimp
13. Wool that is 20 microns in diameter is considered:
A. Quarter blood
B. 3/8 blood
C. 1/2 blood
**D. Fine*
14. What causes a break in the wool fiber?
A: Sickness (fever or very poor nutrition)
15. What is tagging?
A: Removal of the wool from the udder and vaginal area of the ewe prior to lambing
16. How is wool graded?
A: Based on crimp (waviness) and spin count (diameter)

17. Skin folds are highly _____ in sheep.
A: Heritable

HANDLING SECTION N

1. The field of vision for an average sheep is approximately how many degrees?
A: 270
2. To prevent sheep from being spooked by distractions outside the handling facilities, what type of fences should be used in chutes and crowding pens?
A: Solid
3. Which of the following breeds is generally more gregarious or has the greater flocking instinct?
A. Hampshire
B. Dorset
C. Suffolk
**D. Rambouillet*
4. Solid shades should be used over working, sorting and shearing facilities rather than materials such as snow fence. What is the sheep's likely reaction to the snow fence shade?
A: They will balk because of the shadows or contrasting light levels
5. Sheep move more readily:
A. Uphill/with the wind
**B. Uphill/toward the wind*
C. Downhill/with the wind
D. Downhill/toward the wind
6. A producer should provide how many square feet of building space per ewe with lamb at side on dirt floor?
A: 15-20
7. How much linear feeder space should a producer provide for each 80 pound feeder lamb on a self feeder?
A: 1-2 inches
8. Fences and gates of gathering pens should be _____ structure.
A: Open
9. A fairly standard minimum height of fences and gates for a gathering pen is _____ inches.
A: 42 inches
10. Unless the sheep are extremely large or prone to jumping, a standard working chute height is _____ inches.
A: 36 inches

PREDATOR CONTROL SECTION O

1. What is the main wild predator of sheep?
A: Coyote
2. Name two predators, other than a coyote, that sometimes prey on sheep.
A: Dog, fox, bobcat, bear, mountain lion, wolf, eagle
3. Name two breeds of dogs that are commonly regarded as good guard animals to prevent predation.
A: Great Pyrenees, Komondor, Anatolian Shepherd, Akbash, Moremma
4. Name two animals other than guard dogs that are sometimes used to protect sheep from predation.
A: Donkeys, goats, mules, ostriches, llama, sometimes cattle
5. How does the evidence of a typical coyote attack differ from a dog attack?
A: A coyote is usually efficient and kills one animal by strangulation. Dogs will generally mutilate a number of sheep.
6. In Kansas, what is the single most effective management measure a sheep producer can incorporate to reduce coyote predation?
A: Pen sheep at night
7. Name two legal means of predator control.
A: Guard animals, trapping, snaring, shooting, netting
8. Coyote attacks are most likely to occur at _____.
A: Night

CURRENT INFORMATION SECTION P

1. Which state in the U.S. has the highest number of sheep and lambs?
A: Texas
2. Which state in the U.S. finishes more feedlot lambs than any other state?
A: Colorado
3. Which general area of the country produces a high percentage of the lambs to be placed in feedlots?
A: Southwest or Northwest range
4. What is one possible reason for a price dock on light weight lambs in the summer and a dock on heavy weight lambs in the winter?
A: The market can handle a percentage of all weight lambs at all times of the year, but when the market is flooded with too high a percentage of lambs from one weight class, the price drops for that category
5. What is the name of a contract signed by a farmer in which he agrees to deliver a quantity and quality of a commodity such as grain at a specified month and provides a hedge against market fluctuations?
A: A futures contract
6. Where should you look to find the latest recommendations on how to use an antibiotic?
A: On the label
7. What does drug withdrawal time mean in regard to marketing animals for slaughter?
A: The amount of time prior to slaughter for which the animal must be off the drug
8. What is the major problem associated with antibiotics turning up in the lamb on the consumer's table?
A: Some people are allergic to them
9. What Act of Congress regulates safety and health standards for agriculture, business, and industry?
A: Occupational Safety and Health Act (OSHA)
10. What are the current market prices for market lambs?
A:

