True-False (Circle the correct answer).

1. T F Homeostasis refers to the status quo of the individual.
2. T F Wool is a modified hair.
3. T F Maltase is a disaccharide.
4. T F Vitamin C is solubilize by water.
5. T F Photoperiodicity determines the initiation of the estrous cycle of the sheep.
6. T F Crude fiber content of a feed is determined by a proximate analysis.
7. T F Pigs have two cervixes.
8. T F Vitamin d₃ has a provitamin of ergosterol.
9. T F Lymph glands function as a body defense mechanism.
10. T F A sex-linked trait is only expressed in one sex.
11. T F Fats are soluble in ether.
12. T F One involuntary muscle is smooth.
13. T F Protein is determined by nitrogen content of a feed times 6.25.
15. T F Mitosis is sex cell division.
16. T F Essential amino acids are not manufactured by the body.
17. T F Plant proteins have a high biological value.
18. T F All hormones are steroid molecule.
19. T F The universal donor is a blood type O.
20. T F High quality carbohydrate is found in animal products.
21. T F Ruminants digest cellulose by bacterial action.
22. T F Half sibs are more closely related than first cousins.
23. T F Calcium and phosphorous are found in a 2:1 ratio in the animal.
24. T F Sperm must be capacitated before fertilization occurs.
25. T F The sarcomere is the contraction part of skeletal muscle.
26. T F Thumps is an iron deficiency.
27. T F Racing is the highest spectator sport in the US today.
28. T F DNA is made up of nucleotides containing sugar, base and phosphoric acid.
29. T F Several nucleotides make up a gene.
30. T F Genes control carbohydrate production.
31. T F A horse is classed as a mono-gastric.
32. T F Water is not a very important nutrient.
33. T F Milk contains about 4 percent protein.
34. T F True growth is an increase in skeleton, fat, muscle and water.
35. T F Originally horses were selected for transportation and draft.
36. T F Erythrocytes are non-nucleated cells produced in the bone marrow.
37. T F Cholesterol is closely associated with CHD.
38. T F Senescence is the process of growing old.
39. T F The ovary in the hen is located on the left side.
40. T F Basically all muscle fibers are present at birth.
41. T F ACTH production in the fetus causes parturition.
42. T F Mammary duct development is caused by the hormone estrogen.
43. T F Animal rights is one of the fastest growing movement in the US.
44. T F Horses are long day breeders.
45. T F Productivity in sows is one very important economic trait.
46. T F DHIA is an organization that keeps production record.
47. T F Fertilization occurs when two pro-nuclei join.
50. T F All voluntary muscles are classified as striated muscles.

51. The title of the text used in this course is:

52. Name five macrominerals

Calcium, magnesium, potassium, phosphorus, sodium

53. The enzymes for milk protein digestion are ________ and ________ in the stomach and ________ and ________ in the small intestine.

54. The two major functions of a chromosome are DNA and ________.

55. Three disaccharides are ________ and ________.

56. In protein formation within the cell the amino acids are coded by a ________.

57. The Federal Act which provided for the establishment of the Land Grant University system was______.

58. A nucleotide is made up of three things which are ________ and ________.

59. Sucrose is composed of ________ and ________.

60. The major microorganism types in the rumen are ________ and ________.

61. The two animal products that are good sources of carbohydrates are ________ and ________.

62. Two major proteins found in milk are ________ and ________.

63. A sterile heifer calf born co-twin with a bull is called a ________.

64. The animal product with the highest biological value is the ________.

65. The disease associated with extreme protein deficiency is ________.

66. ________ is the scientific study of animal behavior.
68. Sheep provide for the necessities of life for the human, which are __________, __________, __________, and __________.

69. The vascular system that circulates blood to the lungs is the __________ system and to the body is the __________ system.

70. Major methods of animal communication include __________, __________, __________, and __________.

71. Bones are joined to muscles by __________.

72. Fats are digested by the enzyme __________ and emulsified by __________.

73. Gregarious behavior of animals relates to __________.

74. Digestive systems of the __________, __________ and __________ animals can utilize non-protein nitrogen to synthesize protein.

75. Name five general parts of all digestive system: __________, __________, __________, __________, and __________.

76. If, in a random mating population, the frequency of the "A" gene is .8 and the frequency of the "a" is .2, what would be the frequencies of the three genotypes.

77. In the female the production of the ova is refereed to as __________.

78. Name five parts to the common chicken egg. Shell __________, Egg __________, Shell __________, Egg __________, Shell __________.

79. Learning is the ability to organize __________.

80. Name the parts of the male reproductive tract. 

Penis, Testicles, Epididymis, Vas Deferens, Seminal Vessicles, Prostate, Ampulla, Prostate, Baloospermium, Retrocervix, Muscles, Sperm, Sperm.
81. If we select for weaning weight in cattle, how much could we increase weaning weight per year knowing the following information: weaning weight of the herd averaged 500 pounds. The selected males averaged 640 pounds and the selected females averaged 560 pounds. Heritability of weaning weight is 30 percent. Hint genetic change equals (selection differential times heritability) divided by generation interval.

\[
\begin{align*}
400 & = 500 \\
140 & = 180 \\
\times 3 & \quad \times 18 \\
420 & = 9
\end{align*}
\]

82. Thrombin formation in the clotting process requires the vitamin and the mineral in its formation.

83. Name six nutrients.
- Water
- Protein
- Fat
- Vitamin
- Mineral
- Carbohydrate

84. Energy for the ruminant is produced by .

85. Milk is produced in grape like clusters called .

86. Animals classified by their ability to maintain body temperature are , , , , , , and .

87. Name five types of animal behavior.
- Instinct
- Emotion
- Reasoning
- Learning
- Instinct

88. Name four compartments of the ruminant stomach.
- Rumen
- Retention
- omasum
- Abomasum

89. Production of sperm in the male is referred to as .

90. Three essential fatty acids are , , .

91. What are three ways animals communicate
- Chemical
- Visual
- Auditory

92. EPD stand for .

93. What are two classification of horses by their use
- Draft
- Light

94. The two gonadotropins hormones of the anterior pituitary are , .

Pre-Vet 80

Reserved

Van Der Vell
95. Match using the number given the several deficiency syndromes to the specific mineral or vitamin given in the left hand column. Use only one deficiency for each mineral or vitamin, and some may not have their deficiency listed.

| a. _______ Ascorbic acid              | 1. Anemia             |
| b. _______ Calcium                   | 2. Edema              |
| c. _______ Cobalt                    | 3. Beri Beri          |
| d. _______ Copper                    | 4. Encephalomalacia   |
| e. _______ Chlorine                  | 5. Goiter             |
| f. _______ Iodine                    | 6. Grass tetany       |
| g. _______ Iron                      | 7. Infertility        |
| h. _______ Magnesium                 | 8. Milk fever         |
| i. _______ Manganese                 | 9. Night blindness    |
| j. _______ Phosphorous               | 10. Osteomalacia      |
| k. _______ Selenium                  | 11. Parakeratosis     |
| l. _______ Sodium                    | 12. Rickets           |
| m. _______ Thiamin                   | 13. Scurvy            |
| n. _______ Vitamin A                 | 14. Thumps            |
| o. _______ Vitamin D                 | 15. White muscle disease |
| p. _______ Vitamin E                 | 16. Wood chewing (pica) |
| q. _______ Zinc                      |                       |

96. List the parts of the chicken's digestive system. 
Crop, proventriculus, ventriculus, small intestines, large intestines, ceca, ceca, vent.

97. Bonds formed between amino acids are _______ bonds, bonds formed between glycerol and fatty acids are _______.

98. Normal cell division is called _______ where as sex cell division is called _______.

99. How can a vitamin be a dietary essential and not required in the diet.

100. What vitamin has the Greek name that means childbirth and to bring forth _______.

Pre Vet 0D
RESERVED
Van Derwell