MULTIPLE CHOICE

1. In the absence of a known birth date, what is the most common means of determining an animal’s age?
   a. examine bone tissue
   b. examine muscle tissue
   c. examine the teeth
   d. examine the hooves/feet

   ANS: C         PTS:  1

2. Pre-molars and molars are known as _______ teeth.
   a. wisdom
   b. jaw
   c. cheek
   d. deciduous

   ANS: C         PTS:  1

3. Canids are mammals characterized by pointed _______ teeth.
   a. incisor
   b. canine
   c. molar
   d. cheek

   ANS: B         PTS:  1

4. _______ hear at a decibel level of 60,000 cycles per second.
   a. dogs
   b. cats
   c. man
   d. none of the above

   ANS: B         PTS:  1

5. The two classes of vitamins are:
   a. plant, animal
   b. fat soluble, water soluble
   c. fat soluble, protein soluble
   d. water soluble, carbohydrate soluble

   ANS: B         PTS:  1

6. Animals require _______ quarts of water for each pound of solid feed eaten.
   a. 1.0
   b. 1.5
   c. 2.0
   d. 2.5

   ANS: B         PTS:  1

7. Fat provides _______ the energy of carbohydrates.
   a. equal
   b. half
   c. twice
   d. one fourth

   ANS: C         PTS:  1

8. A pregnant cat is known as a:
   a. filly
   b. bitch
   c. queen
   d. gilt

   ANS: C         PTS:  1
9. Grains contain _______ % more energy than roughages.
   a. 50-100          c. 10-15
   b. 25-30          d. 5-10
ANS: A  PTS: 1

10. Which of the following is the most important part of the livestock diet?
    a. grain          c. water
    b. roughage     d. fiber
ANS: C  PTS: 1

11. Which of the following knots releases quickly releasing an animal?
    a. bowline knot          c. reefers knot
    b. granny knot     d. square knot
ANS: C  PTS: 1

12. Applying a nose twitch to a horse should be done by _______ person/persons.
    a. 1          c. 3
    b. 2          d. 4
ANS: B  PTS: 1

13. Necrosis may be defined as _______ tissue.
    a. scratched          c. dead
    b. bruised     d. scab
ANS: C  PTS: 1

14. Gums that are gray, blue or pale rather than pink indicate
    a. fever          c. shock
    b. hypothermia     d. pneumonia
ANS: C  PTS: 1

15. Pressure bandages control _______?
    a. bleeding          c. restrict movement
    b. reduce swelling     d. all of the above.
ANS: D  PTS: 1

16. An epidural is an injection in the _______.
    a. lungs          c. heart chamber
    b. nasal passage     d. spinal cavity
ANS: D  PTS: 1

17. Ringworm is also known as:
    a. dermatitis          c. dermitis
    b. dermatophytosis     d. staphitis
ANS: A  PTS: 1
18. Lice infestations are most common in the:
   a. winter  
   b. fall   
   c. spring
   d. year round
   ANS: A   PTS: 1

19. Meningitis is an infection of the brain:
   a. covering  
   b. tissue  
   c. core
   d. stem
   ANS: A   PTS: 1

20. Grass tetany/grass staggers is the result of a _____ deficiency.
   a. calcium  
   b. magnesium  
   c. zinc
   d. iron
   ANS: B   PTS: 1

21. Passing a tube into a cow’s _______ releases gas and relieves bloat.
   a. reticulum  
   b. rumen  
   c. omasum
   d. abomasum
   ANS: B   PTS: 1

22. Cystic ovaries seem to be more common in ____________ cattle.
   a. beef  
   b. dairy
   c. zebu
   d. Asian
   ANS: B   PTS: 1

23. ____________ is the accumulation of body fat exceeding the amount needed for optimal body function.
   a. Malnutrition  
   b. Obesity
   c. Hypoglycemic
   d. Analgesic
   ANS: B   PTS: 1

24. Which breed of dogs would be more apt to be a victim of gastric dilatation?
   a. Poodle  
   b. Great Dane
   c. Border Collie
   d. Irish Setter
   ANS: B   PTS: 1

25. Exposed, susceptible animals are maintained in quarantine for the duration of the _________ period of the disease.
   a. growth  
   b. development
   c. cystic
   d. incubation
   ANS: D   PTS: 1
26. Isopropyl alcohol (50-70%) is an effective disinfectant for _______ cleaning.
   a. immersion  c. heat  
   b. spot  d. cold  
   ANS: B  PTS: 1

27. Normal skin has both transient and ______ microorganisms.
   a. permanent  c. resident  
   b. dead  d. non infectious  
   ANS: C  PTS: 1

28. All except the ______ is used for bloodless castration.
   a. emasculator  c. burdizzo  
   b. elastrator  d. knife  
   ANS: D  PTS: 1

29. The urethral orifice is an opening from the bladder into the reproductive tract of ______
   a. turkeys  c. male mammals  
   b. chickens  d. female mammals  
   ANS: D  PTS: 1

30. Labor, the birthing process, begins once the fetus enters the birth canal. The three terms used to describe the orientation of the fetus in the birth canal are ______
   a. presentation, position, and posture  c. labor, position, parturition  
   b. presentation, position, parturition  d. presentation, position, and preparation  
   ANS: A  PTS: 1

31. The common name for the contagious disease caused by the brucella abortus bacteria is ______
   a. leptospirosis  c. brucellosis  
   b. vibriosis  d. clostridium perfringens  
   ANS: C  PTS: 1

32. A rabid animal cannot drink because of ______
   a. intestinal blockage  c. excessive nasal swelling  
   b. throat paralysis  d. pustules in the mouth  
   ANS: B  PTS: 1

33. In a medical record the abbreviation SOAP means:
   a. supply, open, apply, prepare  c. submit, observe, ask, prepare  
   b. subjective, objective, assessment, plan  d. scrub, open, assess, plan  
   ANS: B  PTS: 1

34. Which group was responsible for the development of the Animal Welfare Act?
   a. USDA  c. US Veterinary Association  
   b. Congress  d. Alabama Dept. of Agriculture  
   ANS: B  PTS: 1
35. Which of these agencies is responsible for the regulation of animal research?
   a. Farm Bureau
   b. NMADA
   c. Alabama Veterinary Association
   d. USDA

   ANS: D  PTS: 1

36. To what animals does the USDA Animal Welfare Act apply?
   a. Nonhuman primates
   b. Any live or dead dog
   c. Warm blooded animal used for research
   d. All the above

   ANS: D  PTS: 1

37. Animal researchers attempt to minimize animal pain and use a concept known as the “three Rs” as a means of pain reduction. The three “Rs” are;
   a. replacement, reduction, refinement
   b. replacement, refinement, realignment
   c. refinement, reduction, reducing
   d. replacement, refinement, realowance

   ANS: A  PTS: 1

38. Utilizing cell cultures rather than a live animal for research would be known as
   a. refinemen
   b. reductio
   c. replacement
   d. none of these

   ANS: C  PTS: 1

39. Utilizing fewer animals in a research project would be known as
   a. reduction
   b. replacement
   c. refinement
   d. all of the above

   ANS: C  PTS: 1

40. Reducing an animal’s pain during a research project would be known as
   a. reduction
   b. refinement
   c. replacement
   d. None of the above

   ANS: B  PTS: 1

41. Using new analgesics, new aesthetics, new bleeding techniques and new surgical techniques are a means of
   a. replacement
   b. refinement
   c. reduction
   d. None of the above

   ANS: B  PTS: 1

42. According to the USDA pain/distress categories an animal that is experiencing no pain would be in:
   a. category D
   b. category A
   c. category B
   d. category E

   ANS: C  PTS: 1
43. According to the USDA pain/distress categories, an animal exposed to a potentially painful procedure for which anesthetics, analgesics, or tranquilizers will be used is in which pain category?
   a. category C  
   b. category A  
   c. category B  
   d. category D  
   ANS: D  
   PTS: 1

44. Category _____ are those procedures in which animals are subjected to painful or stressful procedures without the use of anesthetics, analgesics or tranquilizers.
   a. A  
   b. E  
   c. F  
   d. B  
   ANS: B  
   PTS: 1

45. Euthanasia literally means
   a. Research death  
   b. Chemical induced death  
   c. Death of a laboratory animal  
   d. Gentle death  
   ANS: D  
   PTS: 1

46. The USDA defines euthanasia as
   a. Humane destruction of an animal  
   b. Rapid unconsciousness and subsequent death without evidence of pain  
   c. Painless loss of consciousness leading to death  
   d. All the above  
   ANS: D  
   PTS: 1

47. Which of the following is a method of euthanasia?
   a. Physical  
   b. Non-physical  
   c. Pharmacologic methods  
   d. All the above  
   ANS: D  
   PTS: 1

48. Physical methods of euthanasia would include
   a. Captive bolts  
   b. Cervical dislocation  
   c. Decapitation  
   d. All the above  
   ANS: D  
   PTS: 1

49. Veterinary medicine is defined as
   a. The cure of animal disease  
   b. Science of prevention of disease in animals  
   c. The treatment of injury in animals  
   d. All the above  
   ANS: D  
   PTS: 1

50. There are approximately ________ veterinarians in private practice in the US.
   a. 912  
   b. 2 million  
   c. 12, 516  
   d. 65,000  
   ANS: D  
   PTS: 1
51. Which of the following is not a field of veterinary practice
   a. Public                   c. Social
   b. Private                 d. Industry
   ANS: C    PTS:  1

52. Anatomy may be defined as the study of the animal
   a. Body                     c. Digestive system
   b. Nervous system           d. Circulatory system
   ANS: A    PTS:  1

53. Gross anatomy is the study of structures with the
   a. Telescope                c. Naked Eye
   b. Microscope              d. Magnifying glass
   ANS: C    PTS:  1

54. Microscopic anatomy is the study of structures that are ___________ to the human eye.
   a. Visible                  c. Hidden
   b. Invisible                d. Unsafe
   ANS: B    PTS:  1

55. Which of the following is not a part of the lymphatic system?
   a. Tonsils                   c. Testicle
   b. Lymph nodes             d. Spleen
   ANS: C    PTS:  1

56. A glass thermometer should be held in place for ______________ minutes.
   a. 1                        c. 2
   b. 3                        d. 7
   ANS: C    PTS:  1

57. Body temperature is not affected by
   a. Exercise                 c. Daylight
   b. External temperature    d. Anesthesia
   ANS: A    PTS:  1

58. Which of the following is not a dog group recognized the by AKC?
   a. Herding                  c. Hound
   b. Sporting                d. Hunting
   ANS: D    PTS:  1

59. Animals require quarts of water for each pound of solid feed eaten.
   a. 1.0                      c. 2.5
   b. 1.5                      d. 2.0
   ANS: B    PTS:  1
60. The two classes of vitamins are
   a. Water soluble and fat soluble          c. Fat soluble and digestible
   b. Water soluble and digestible          d. Water soluble and carbohydrate based

   ANS: A        PTS:  1

61. The two types of minerals are
   a. Macro and mini          c. Micro and mini
   b. Macro and micro         d. Digestible and non-digestible

   ANS: B        PTS:  1

62. Cats are unique because they have
   a. Five toes on the fore foot and four toes on the hind foot
   b. Four toes on the fore foot and five toes on the hind foot
   c. Hair balls in their stomach
   d. Have whiskers

   ANS: A        PTS:  1

63. Which of the following aid in digestion?
   a. Roughages           c. biologic
   b. Concentrates        d. none of the above

   ANS: A        PTS:  1

64. When choosing a restraint method which of the following is not a factor?
   a. The facilities       c. Safety for the handler
   b. Safety for the animal d. Type of rope available

   ANS: D        PTS:  1

65. Calves should be weaned at _______ months of age
   a. 3-4          c. 5-9
   b. 7-11         d. 1-2

   ANS: C        PTS:  1

66. Foals should be weaned at _______ months of age.
   a. 2-3          c. 11-16
   b. 7-9          d. 4-6

   ANS: D        PTS:  1

67. Only _________% of Americans rely on animals to complete their daily tasks
   a. 16          c. 2
   b. 25          d. 29

   ANS: C        PTS:  1
68. The ASPCA was established in
   a. 1968
   b. 1971
   c. 1929
   d. 1866
   ANS: D   PTS: 1

69. Which species does parvovirus generally affect?
   a. Dogs
   b. Cats
   c. Horses
   d. Rats
   ANS: A   PTS: 1

70. Which moisture content would be representative of semi-moist pet foods?
   a. 23-38 %
   b. 5-10%
   c. 45-62%
   d. 44-59%
   ANS: A   PTS: 1

71. Which of the following is not a type of disinfection method?
   a. Physical
   b. Environmental
   c. Chemical
   d. Biological
   ANS: B   PTS: 1

72. Which of the following is not a class of chemical disinfectants?
   a. Formaldehyde
   b. Alkalies
   c. Phenolics
   d. Chlorhexidine
   ANS: A   PTS: 1

73. Bedding should be constructed with the animal’s needs and_________functions in mind.
   a. Health
   b. Nutritional
   c. Biologic
   d. Zoonotic
   ANS: C   PTS: 1

74. An unpleasant sensory and emotional experience associated with potential or actual tissue damage is
    known as
   a. Pain
   b. Hunger
   c. Disease
   d. Injury
   ANS: A   PTS: 1

75. Which of the following would indicate pain?
   a. Vocalization
   b. Silence
   c. Self mutilation
   d. All the above
   ANS: D   PTS: 1

76. The deep pectoral muscle is located on an animal’s
   a. Back
   b. Sternum area
   c. Loin area
   d. Near the tail head
   ANS: B   PTS: 1
77. A dog’s trapezius muscle would be located on its
   a. Hip                          c. On either side of its tail
   b. Shoulder                    d. Beneath the stomach
   ANS: B                           PTS: 1

78. Which blood vessels carry blood from the heart to the body?
   a. Arteries                     c. Capillaries
   b. Veins                        d. Nerves
   ANS: A                           PTS: 1

79. Which blood vessels carry blood from the body to the heart?
   a. Nerves                       c. Capillaries
   b. Arteries                     d. Veins
   ANS: D                           PTS: 1

80. Which type of blood is pumped to the lungs?
   a. Deoxygenated                 c. Healthy
   b. Oxygenated                   d. Red blood cells
   ANS: A                           PTS: 1

81. Which organ acts as a clearing house for old worn out red blood cells?
   a. Liver                        c. Spleen
   b. Heart                       d. Appendix
   ANS: C                           PTS: 1

82. Which of the following is a monogastric animal?
   a. Ewe                          c. Dog
   b. Cow                          d. Dairy goat
   ANS: C                           PTS: 1

83. Which ruminant stomach removes excess water from the stomach contents?
   a. Rumen                        c. Reticulum
   b. Abomasum                     d. Omasum
   ANS: D                           PTS: 1

84. Which of the following may cause colic in horses?
   a. A change of diet              c. Excessive intake of grain
   b. Parasite infection           d. All the above
   ANS: D                           PTS: 1

85. Breathing is a/an __________ action of the body.
   a. Voluntary                     c. Incidental
   b. Involuntary                   d. Intercostal
   ANS: B                           PTS: 1
86. Where are the intercostal muscles located?
   a. Between the ribs                   c. Beneath the jaw bone
   b. On either side of an animal’s tail head  d. Below the eye
ANS: A          PTS:  1

87. Which of the following is not a part of the urinary system?
   a. Epididymis                      c. Ureters
   b. Kidneys                        d. Bladder
ANS: A          PTS:  1

88. The pituitary gland is a part of the _________ system.
   a. Nervous                        c. Endocrine
   b. Digestive                     d. Respiratory
ANS: C          PTS:  1

89. Hormones travel through the
   a. Blood stream                  c. Nervous system
   b. Respiratory system           d. Reproductive cells
ANS: A          PTS:  1

90. Nerve cells are also known as
   a. Axons                         c. Neurons
   b. Dendrites                    d. Nerve cell bodies
ANS: C          PTS:  1

91. Which of the subdivisions of the brain coordinate muscle movement?
   a. Cerebrum                      c. Medulla oblongata
   b. Cerebellum                   d. Nerve fibers
ANS: B          PTS:  1

92. Which of the following is a sign of a healthy animal?
   a. Tail tucked                  c. Avoiding eye contact
   b. Crouched                     d. None of these
ANS: D          PTS:  1

93. Which of the following patients can be especially sensitive to smell?
   a. Dogs and cats                c. Cats and horses
   b. Mice and gerbils             d. Reptiles
ANS: C          PTS:  1

94. The burrito method (wrapping in a towel) is especially useful when your patient is a:
   a. Canine                      c. Ovine
   b. Feline                      d. Bovine
ANS: B          PTS:  1
95. _______ is one of the first signs of clinical symptoms of disease or illness.
   a. Elevated body temperature
c. Excessive vocalization
d. Lack of vocalization
   b. Tearing
ANS: A          PTS: 1

96. Alcohol applied to the pads of _______ will lower their temperature.
   a. Cats
c. Chickens
   b. Dogs
d. Horses
ANS: D          PTS: 1

97. Which of the following animals has a normal body temperature of 101.5°F?
   a. dog
c. beef cattle
d. All the above
   b. cat
ANS: D          PTS: 1

98. Which of the following species has the lowest resting pulse rate?
   a. Pig
c. Horse
d. Dog
   b. Cattle
ANS: C          PTS: 1

99. Which of the following species has the highest resting respiratory rate?
   a. Cats
c. Pig
d. Dogs
   b. Cattle
ANS: C          PTS: 1

100. In the canine and feline patient, the best place to take the arterial pulse is
   a. Inside the rear leg
c. Beneath the jaw
d. Along the sternum
   b. Inside the front leg
ANS: A          PTS: 1

101. Which species of animal has incisor teeth that continually erupt?
   a. Snakes
c. Dogs
   b. Chicken
d. Horse
ANS: D          PTS: 1

102. Dogs are able to hear _______ times better than humans.
   a. Three
c. Four
d. Five
   b. Two
ANS: B          PTS: 1

103. The Bullmastiff is a _______ dog.
   a. toy
c. hound
d. working
   b. sporting
ANS: D          PTS: 1
104. Which of the following domestic animals is best adapted of all at eating a diet of prey?
   a. Cats                                   c. Hunting class dogs
   b. Dogs                                  d. Guard dogs

   ANS: A  PTS:  1

105. Which of the following breeds of cattle have Bos indicus ancestry?
   a. Angus                                  c. Charolais
   b. Hereford                               d. Brangus

   ANS: D  PTS:  1

106. The Berkshire breed of swine closely resembles which other swine breed?
   a. Poland China                           c. Landrace
   b. Yorkshire                              d. Duroc

   ANS: A  PTS:  1

107. Which of the following is not considered a “light breed“ of horses?
   a. Paint                                  c. Thoroughbred
   b. Quarter Horse                          d. Belgian

   ANS: D  PTS:  1

108. Which of the following is not a plant protein product?
   a. Corn                                   c. Cottonseed meal
   b. Soybeans                               d. Milk

   ANS: D  PTS:  1

109. Which class of nutrients provides energy?
   a. Carbohydrates                          c. Proteins
   b. Fats and Oils                          d. Minerals

   ANS: B  PTS:  1

110. __________ are essential for normal growth and development.
    a. Vitamins                               c. Carbohydrates
    b. Fats and oils                         d. Proteins

   ANS: D  PTS:  1

111. The two classes of minerals are ____________.
    a. Macro and micro                       c. Micro and major
    b. Macro and mini                        d. Major and macro

   ANS: A  PTS:  1
112. A senior dog's diet should be low in _____ and _____ to reduce the workload on the kidneys and heart.
   a. Protein, salt  
   b. Fat, salt  
   c. Carbohydrates, salt  
   d. Oil, salt  
   ANS: A  
   PTS: 1

113. The mother cat is referred to as the _____________.
   a. Sow  
   b. Queen  
   c. Doe  
   d. Gilt  
   ANS: B  
   PTS: 1

114. Which of the following has a gestation period of 63 days?
   a. Dogs and cats  
   b. Rats and chickens  
   c. Rabbits and gerbils  
   d. Goats and sheep  
   ANS: A  
   PTS: 1

115. Large breed puppies such as Labradors need a special diet to prevent _____________.
   a. Colitis  
   b. Heart problems  
   c. Joint problems  
   d. Colitis  
   ANS: C  
   PTS: 1

116. When do Queens gain weight during pregnancy?
   a. Last trimester  
   b. First three weeks  
   c. Throughout  
   d. First trimester  
   ANS: C  
   PTS: 1

117. Which of the following requires a 22% protein diet?
   a. Rabbit  
   b. Gerbil  
   c. Guinea pigs  
   d. Hamsters  
   ANS: B  
   PTS: 1

118. Which of the following requires supplemental vitamin C because like humans their body is unable to manufacture vitamin C.
   a. Guinea pigs  
   b. Rabbits  
   c. Hamsters  
   d. Ferrets  
   ANS: A  
   PTS: 1

119. Which of the following feed ingredients is not considered a forage?
   a. Pinto Beans  
   b. Oat hay  
   c. Alfalfa  
   d. Grass hay  
   ANS: A  
   PTS: 1
120. Grains generally provide _________ to 100% more energy than forages.
   a. 80
c. 75
d. 25
   ANS: B  PTS:  1

121. Which of these knots is the least useful?
   a. Granny knot
c. Overhand knot
b. Surgeons knot
d. Square knot
   ANS: C  PTS:  1

122. Cattle’s eyes enable them to have _________ degree panoramic vision.
   a. 260
c. 300
b. 360
d. 180
   ANS: C  PTS:  1

123. Putting a nose twitch on a horse requires _________ people.
   a. One
c. Three
b. Two
d. Four
   ANS: B  PTS:  1

124. Swine are usually restrained using a _________.
   a. Head gate
c. Halter
b. Twitch
d. Snare
   ANS: D  PTS:  1

125. Sheep instinctively flock together for _________.
   a. Socialization
c. Lambing
b. Breeding
d. Protection
   ANS: D  PTS:  1

126. When handling rodents they should be grasped at the _________ of the tail.
   a. base
c. middle
b. tip
d. Rodents should not be handled by grasping their tail.
   ANS: B  PTS:  1

127. Ratites should be moved using _________.
   a. Stock dogs
c. Hazing
b. Panels
d. Only after roping and restraining
   ANS: B  PTS:  1

128. Llamas are known to be _________.
   a. clumsy
c. stubborn
b. aggressive
d. passive
   ANS: D  PTS:  1
129. Which of the following animals has the ability to spit regurgitated stomach contents when agitated.
   a. Venomous snakes       c. turkeys
   b. llamas                d. gerbils
   ANS: B                    PTS: 1

130. When snakes are handled within _________ to _________ hours after being fed they may regurgitate.
   a. 24, 48               c. 6, 8
   b. 8, 12                d. 36, 48
   ANS: A                    PTS: 1

131. If a snake's body diameter is larger than it should be supported by two people.
   a. Your arm              c. A chair leg
   b. A coke bottle         d. Your ankle
   ANS: A                       PTS: 1

132. Improper handling of snakes commonly leads to ____________________.
   a. Aggressive behavior    c. Dislocation of the jaw
   b. Shy withdrawn behavior d. Spinal Injury
   ANS: C                        PTS: 1

133. Quite often a lizard will _______ when handled.
   a. Vomit                  c. Drop its tail
   b. Spit                   d. Play dead
   ANS: C                        PTS: 1

134. ________ birds have strong jaws and large heavy bills.
   a. Psittacine             c. Precocial
   b. Altricial              d. Antisocial
   ANS: A                       PTS: 1

135. When handling birds you should _________ the light intensity of the room.
   a. Increase               c. Use black lights
   b. Reduce                 d. Use red bulbs
   ANS: B                        PTS: 1

136. The physical exam of an ill pet should begin with ____________________.
   a. Restrain               c. Weighing the animal
   b. Observation            d. Checking vital signs
   ANS: B                          PTS: 1

137. If a horse is lame the veterinarian may want to perform an initial ________________.
   a. Flexion test           c. X-rays
   b. Surgery                d. Cat scan
   ANS: A                                PTS: 1
138. What color should mucous membranes be?
   a. Grey  
   b. Pink  
   c. Blue  
   d. Pale white  
   ANS: B  PTS: 1

139. Blood flowing from a vein will be___________ in color.
   a. Bright red in a continuous flow  
   b. bright red flowing in spurts  
   c. slow to coagulate  
   d. Dark in color  
   ANS: D  PTS: 1

140. If a tourniquet is used it should be loosened every_____ to_____ minutes.
   a. 20,30  
   b. 5,10  
   c. 10,15  
   d. 45,60  
   ANS: C  PTS: 1

141. What generally determines the dose of drugs prescribed for a patient?
   a. Patient weight  
   b. Cause of illness or injury  
   c. Season of the year  
   d. Climatic conditions  
   ANS: A  PTS: 1

142. Common syringe needles used in veterinary clinics will range from_____ to_____ gauge.
   a. 16,20  
   b. 18,22  
   c. 14,24  
   d. 14,28  
   ANS: C  PTS: 1

143. The common solution to clean dirt, hair or dandruff from a patient is______________.
   a. 70% alcohol  
   b. Iodine  
   c. Hydrogen peroxide  
   d. Clorox  
   ANS: A  PTS: 1

144. Which of the following is not a type of common injection?
   a. Intradermal  
   b. Intradermal  
   c. Intramuscular  
   d. Subcutaneous  
   ANS: B  PTS: 1

145. Fecal samples are commonly examined for evidence of______________.
   a. Parasite eggs  
   b. Disease spores  
   c. Bacteri  
   d. Fungi  
   ANS: A  PTS: 1

146. A post mortem examination is also known as______________.
   a. Tissue collection  
   b. Surgical procedure  
   c. Spinal tap  
   d. Necropsy  
   ANS: D  PTS: 1
147. The most common source of a disease outbreak is _________________.
   a. Contact with an infected animal  c. Contact of mucous membrane tissue
   b. Exchange of blood borne bacteria  d. Contact with infected wound tissue

   ANS: A  PTS: 1

148. Transmission routes between the original disease host and the new host include ________________.
   a. Venereal  c. Ingestion
   b. Skin contact  d. All the above

   ANS: D  PTS: 1

149. Modes of indirect disease transmission include _________________.
   a. Vectors  c. Fomites
   b. Vehicles  d. All the above

   ANS: D  PTS: 1

150. Which of the following is not a common disease vector?
   a. Pickup truck  c. Mosquitoes
   b. Flies  d. Gnats

   ANS: A  PTS: 1

151. Mechanical disease transmission generally takes place in a very ______ period of time.
   a. Short  c. Intermittent
   b. Long  d. Yearly

   ANS: A  PTS: 1

152. The life cycle of a tick may be____to_______years.
   a. 1,2  c. 1,5
   b. 2,3  d. 9,11

   ANS: C  PTS: 1

153. Which of the following is only transmissible by direct skin contact?
   a. Lice  c. Round worms
   b. Screw worms  d. Tape worms

   ANS: A  PTS: 1

154. External parasites are known as _________________.
   a. Anthropods  c. Dendrites
   b. Arthropods  d. Tenticles

   ANS: B  PTS: 1

155. Which type of animal is especially susceptible to Antrax?
   a. Ruminants  c. Horses
   b. Rodents  d. Swine

   ANS: A  PTS: 1
156. Anthrax is a zoonotic disease that may affect humans. Humans are susceptible to _____ form of anthrax.
   a. Intestinal
   b. Cutaneous
   c. Pulmonary
   d. All of the above

   ANS: D    PTS: 1

157. Brucellosis is found world-wide in which of the following types of animals?
   a. Domestic
   b. Wild
   c. Semi-domestic
   d. All of the above

   ANS: D    PTS: 1

158. Brucellosis is found world-wide in which of the following types of animals?
   a. Domestic
   b. Wild
   c. Semi-domestic
   d. All the above

   ANS: D    PTS: 1

159. Brucellosis usually affects the_______ tract of infected animals.
   a. Digestive
   b. Reproductive
   c. Circulatory
   d. Respiratory

   ANS: B    PTS: 1

160. Brucellosis generally causes ____________________.
   a. Low birth rates
   b. Stunted offspring
   c. Abortions
   d. Poor appetites

   ANS: C    PTS: 1

161. Cat Scratch Disease CSD most commonly affect__________________.
   a. Adolescents
   b. Elderly
   c. Adults
   d. Children

   ANS: D    PTS: 1

162. Which of the following diseases is also known as parrot fever?
   a. Chlamydiosis
   b. Cat scratch fever
   c. Vibriosis
   d. Trichinosis

   ANS: A    PTS: 1

163. A clinical symptom of chlamydiosis would be ________________.
   a. Bloody stools
   b. Brown diarrhea
   c. Greenish Diarrhea
   d. Extreme constipation

   ANS: C    PTS: 1

164. Erysipelas is primarily a disease of ____________________.
   a. Fish
   b. Cattle
   c. Horses
   d. Swine

   ANS: D    PTS: 1
165. Which group of animals serves as the primary carriers of leptospirosis?
   a. Birds  c. Reptiles
   b. Fish    d. Rodents
   ANS: D    PTS: 1

166. Which of the following diseases has very similar symptoms to rabies?
   a. Listeriosis  c. Weil’s disease
   b. Brucellosis  d. Lyme disease
   ANS: A    PTS: 1

167. Which of the following are primary reservoirs of Lyme disease?
   a. White tailed deer  c. Dairy cattle
   b. Beef cattle        d. Sheep
   ANS: A    PTS: 1

168. Which animals may suffer neurological symptoms as a result of Lyme disease?
   a. Dogs, cats  c. Mice, gerbils
   b. Cats, horses d. Birds, reptiles
   ANS: B    PTS: 1

169. Humans have been infected with the plague as a result of contact with ____________.
   a. Coyotes  c. Cats
   b. Dogs     d. All the above
   ANS: D    PTS: 1

170. The plague is generally transmitted by ____________.
   a. Mosquitos  c. Black fly
   b. Fleas      d. Recluse spider
   ANS: B    PTS: 1

171. In humans and animals, salmonellosis will cause ____________.
   a. Watery diarrhea  c. Nausea
   b. Fever           d. All the above
   ANS: D    PTS: 1

172. Encephalitis is also known as ____________.
   a. Bloody scours   c. Sleeping sickness
   b. Blind staggering d. Grass tetany
   ANS: C    PTS: 1

173. In what region of the US is hantavirus most commonly a problem?
   a. Southeast      c. Southwest
   b. Northeast      d. Northwest
   ANS: C    PTS: 1
174. Rabies is also known as ________________.  
   a. Hydromania  
   b. Acrophobia  
   c. Hydrophobia  
   d. Aquaphobia  
   ANS: C  PTS: 1

175. The primary means of rabies transmission is via ________________.  
   a. Blood contact  
   b. Urine  
   c. Saliva  
   d. Necrotic tissue contact  
   ANS: C  PTS: 1

176. Ringworm is the common name for ________________.  
   a. Dermatophytosis  
   b. Dermatitis  
   c. Epidermatoposis  
   d. Epidermatitis  
   ANS: A  PTS: 1

177. Which of the following is a blood parasite responsible for heartworm in dogs?  
   a. Dirofilaria immitis  
   b. Dipyidium canium  
   c. Dypylidiasis  
   d. Toxocara canis  
   ANS: A  PTS: 1

178. In dogs the adult heartworm resides in the ________________.  
   a. Heart Valves  
   b. left ventricle  
   c. Pulmonary veins  
   d. Right ventricle  
   ANS: D  PTS: 1

179. _______ and _______ commonly transmit roundworms to humans.  
   a. Puppies and kittens  
   b. Mature cattle and calves  
   c. Small pets such as gerbils and hamsters  
   d. Rodents  
   ANS: A  PTS: 1

180. The majority of _______ infected with toxoplasmosis show no symptoms.  
   a. Swine  
   b. Cattle  
   c. Dogs  
   d. Cats  
   ANS: D  PTS: 1

181. Viruses are small _______ organisms.  
   a. non-cellular  
   b. cellular  
   c. bleeding  
   d. Sinusitis  
   ANS: A  PTS: 1

182. Viruses infect animal _________.  
   a. Membranes  
   b. Tissues  
   c. Fluids  
   d. Cells  
   ANS: D  PTS: 1
183. Bacteria are tiny_________organisms.
   a. Multi-celled c. Non cellular
   b. Single-celled d. cellular

   ANS: B PTS: 1

184. A fungi is a single celled organism that is_________than bacteria.
   a. Larger c. similar in size
   b. smaller d. not undergoing cellular division

   ANS: A PTS: 1

185. Gastroenteritis is the_________of the gastrointestinal tract.
   a. Infection c. Reduction
   b. Inflammation d. Bleeding

   ANS: B PTS: 1

186. Which of the following is the inflammation of the mucous membranes of the nasal passages?
   a. Sinusitis c. Tonsillitis
   b. Rhinitis d. Tuberculosis

   ANS: B PTS: 1

187. Pneumonitis is the acute or chronic inflammation of the___________.
   a. Lung tissue c. Intestinal tract
   b. Esophagus d. Reproductive tract

   ANS: A PTS: 1

188. Metritis is the inflammation of the_________due to viral, protozoal or bacterial infections.
   a. uterus c. cervix
   b. vagina d. ovary

   ANS: A PTS: 1

189. Mastitis is the inflammation of the__________.  
   a. Infinidibulum c. Scrotum
   b. Testicles d. Udder tissue

   ANS: D PTS: 1

190. An increased_________cell count would indicate mastitis.
   a. White c. Red blood
   b. Somatic d. Sperm

   ANS: B PTS: 1

191. Warts are fibrous tumors of the___________.  
   a. Bone c. Skin
   b. Muscle d. Nerves

   ANS: C PTS: 1
192. Myocarditis is an inflammation of the_______ muscle.
   a. Hip                      c. Heart
   b. Sternum                  d. Lung

   ANS: C          PTS:  1

193. Conjunctivitis is an inflammation of the______________.
   a. Interior lining of the eyelids  c. Inner ear
   b. External ear canal                d. Cornea

   ANS: A          PTS:  1

194. Ear infections are more common in________ animals.
   a. All                          c. Small
   b. Large                      d. Ear infections are not a common ailment in animals.

   ANS: C          PTS:  1

195. Water makes up about__________ % of an animal’s body.
   a. 50                                 c. 90
   b. 60                                 d. 85

   ANS: B          PTS:  1

196. Which of the following is required for healthy bone growth?
   a. Minerals                    c. Carbohydrates
   b. Fats                       d. Proteins

   ANS: A          PTS:  1

197. A deficiency of which of the following will contribute to a condition known as grass tetany?
   a. Phosphorus                c. Calcium
   b. Iron                     d. Magnesium

   ANS: D          PTS:  1

198. Milk fever is created by a deficiency of_______ following calving.
   a. Magnesium               c. Calcium
   b. Phosphorus             d. Cobalt

   ANS: C          PTS:  1

199. Which class of cattle seem to suffer from cystic ovaries the most?
   a. dairy                   c. range
   b. beef                   d. feedlot heifers

   ANS: A          PTS:  1

200. Dystocia is the term for______________________.
   a. Difficult or impossible birth  c. Lambing paralysis
   b. Displacement of one or both hips   d. Low blood sugar

   ANS: A          PTS:  1
201. Animals exposed to excessive high temperatures for extended periods of time may suffer from
   ________________.
   a. Hypothermia                       c. Excessive hydration
   b. Hypothermia                       d. Pulpy kidney disease

   ANS: B                          PTS: 1

202. ______ is the first milk produced by female animals that have recently given birth.
   a. Colostrum                       c. Calcium
   b. Clostridium                     d. Subunit

   ANS: A                          PTS: 1

203. Bleach is an effective disinfectant. What kind of disinfectant is bleach?
   a. Ammonium                       c. Formaldehyde
   b. Alkalies                       d. Chlorine

   ANS: D                          PTS: 1

204. Labor begins with the initial contractions of the ________________.
   a. Cervix                         c. Ovaries
   b. Uterus                         d. Vagina

   ANS: B                          PTS: 1

205. The triceps brachii muscle is located on the outside of the upper______ of cattle.
   a. Rib Cage                      c. Shoulder
   b. Neck                          d. Between the pastern and knee

   ANS: C                          PTS: 1

206. The superficial muscle is located between the______ of a horse.
   a. Front legs                    c. Ears
   b. Rear legs                     d. Nostrils

   ANS: A                          PTS: 1

207. The latissimus dorsi muscle of the dog is located:
   a. Along the upper side of the neck c. On the outer side of the front leg
   b. Along the throat              d. Behind the shoulder above the upper rib cage

   ANS: D                          PTS: 1

208. The integumentary system includes the______ and______
   a. Skin and skeletal structure   c. Skin and digestive structures
   b. Skin and modified skin structures d. Skin and circulatory structures

   ANS: B                          PTS: 1
209. Functions of the skin include:
   a. Defense against harmful agents
   b. Regulates body temperature
   c. Water balance
   d. All the above

   ANS: D  PTS:  1

210. Which of the following is not a layer of skin?
   a. Dermis
   b. Epidermis
   c. Hypodermis
   d. None of the above

   ANS: C  PTS:  1

211. Which of the following is the outer layer of skin?
   a. Hypodermis
   b. Dermis
   c. Epidermis
   d. Dyddrodermis

   ANS: C  PTS:  1

212. Which layer of skin is the deepest and contains primarily fat?
   a. Hypodermis
   b. Dermis
   c. Epidermis
   d. None of the above

   ANS: A  PTS:  1

213. The_____ is a deep layer of skin with dense, irregular connective tissue.
   a. Epidermis
   b. Dermis
   c. Hypodermis
   d. Exodermis

   ANS: B  PTS:  1

214. Which of the following are modified skin structures?
   a. Horns
   b. Hooves
   c. Claws
   d. All the above

   ANS: D  PTS:  1

215. ________ connect(s) bone to bone.
   a. Muscle
   b. Ligaments
   c. Tendons
   d. Cartilage

   ANS: B  PTS:  1

216. ________ attach(es) muscle to bone.
   a. Tendons
   b. Ligaments
   c. Muscle
   d. Cartilage

   ANS: A  PTS:  1

217. Smooth muscle, mononucleated and nonstriated, is involved in ________ contraction and located in the
    wall of ________ organs.
   a. Involuntary, rigid
   b. Voluntary, hollow
   c. Voluntary, solid
   d. Involuntary, hollow

   ANS: D  PTS:  1
218. Skeletal muscle, large, striated, and multi-nucleated, is used for ______ movement and attached to ______ organs.
   a. Voluntary, organs  
   b. Involuntary, bone  
   c. Voluntary, bone  
   d. Involuntary, eye muscles

   ANS: C  PTS: 1

219. Which of the following is a type of bone?
   a. Long  
   b. Short  
   c. Flat  
   d. All of the above

   ANS: D  PTS: 1

220. Which type of bone has a shaft and two extremities?
   a. Short  
   b. Long  
   c. Irregular  
   d. Flat

   ANS: B  PTS: 1

221. Which type of bone is the same dimension in all directions?
   a. Flat  
   b. Long  
   c. Short  
   d. Hollow

   ANS: C  PTS: 1

222. ______ bones have two surfaces that are parallel to each other
   a. One  
   b. Three  
   c. Two  
   d. Four

   ANS: C  PTS: 1

223. Bone functions include ____________________.
   a. Support  
   b. Protection  
   c. Mineral regulation  
   d. All of the above

   ANS: D  PTS: 1

224. Muscles are a collection of ______ cells.
   a. Elongated  
   b. Round  
   c. Elastic  
   d. Meiosis

   ANS: A  PTS: 1

225. Muscle cells have the ability to ______ and ______ to produce movement and generate force.
   a. Contract, thicken  
   b. Contract, shorten  
   c. Elongate, stretch  
   d. Contract, elongate

   ANS: D  PTS: 1
226. A distinguishing feature of muscle is its high level of
a. Fat c. Water
b. Carbohydrate d. Protein
ANS: D PTS: 1

227. What type of blood is pumped into the lungs?
a. Deoxygenated c. Oxygenated and deoxygenated
b. Oxygenated d. Blood is not pumped into the lungs
ANS: A PTS: 1

228. How many chambers are found in the heart?
a. Six c. Three
b. Two d. Four
ANS: D PTS: 1

229. Deoxygenated blood is returned to the heart through the
a. Left atrium c. Right ventricle
b. Right atrium d. Left ventricle
ANS: B PTS: 1

230. Oxygenated blood from the lungs is sent through left atrium to the left
a. Ventricle c. Right atrium
b. Aorta d. Left atrium
ANS: A PTS: 1

231. Blood leaving the heart is pumped through the_______ to other organs of the body.
a. Left aorta c. Left ventricle
b. Jugular d. Aorta
ANS: D PTS: 1

232. The moderator band is located in the_______.
a. Penis c. Cecum
b. Rectum d. Heart
ANS: D PTS: 1

233. Lymph vessels run parallel to the_______ system.
a. Venous c. Arterial
b. Nervous d. Digestive
ANS: A PTS: 1

234. The_______ serves in the normal development and maintenance of immunologic cells
a. Spleen c. Thymus
b. Cowper’s gland d. Gall bladder
ANS: C PTS: 1
235. The process of ____________ involves the mouth, teeth, tongue, lips, cheeks, and palate.
   a. Prehension        c. Absorption
   b. Digestion         d. Elimination

   ANS: A     PTS:  1

236. Which ruminant stomach eliminates water as a part of the digestive process?
   a. Omasum        c. Reticulum
   b. Abomasum      d. Rumen

   ANS: A     PTS:  1

237. Which two ruminant stomachs work together with symbiotic bacteria and protozoa to break down food?
   a. Rumen, omasum       c. Rumen, reticulum
   b. Omasum, abomasum    d. Abomasum reticulum

   ANS: C     PTS:  1

238. Breathing is accomplished when the ________ muscle contracts and then relaxes.
   a. Deltoid        c. Gluteous
   b. Diaphragm      d. Intercostal

   ANS: B     PTS:  1

239. Important accessories of the reproductive system include:
   a. Fluids, hormones, pheromones X      c. Blood, hormones, pheromones
   b. Water, hormones, pheromones          d. Leutinizing hormones, follicle stimulating hormones, testosterone

   ANS: A     PTS:  1

240. In addition to gaseous exchange the respiratory system also ________________.
   a. Warms and humidifies air       c. Aids in olfaction
   b. Removes foreign particles      d. All the above

   ANS: D     PTS:  1

241. Which organ aids in blood pressure regulation and the control of red blood cell production in bone marrow?
   a. Liver        c. Bladder
   b. Kidney       d. Testicle

   ANS: B     PTS:  1

242. An outgoing spinal nerve impulse is known as ________________.
   a. Deterrent        c. Adherent
   b. Afferent         d. Efferent

   ANS: D     PTS:  1
243. An incoming spinal nerve impulse is known as _________________.
   a. Afferent                     c. Deterrent
   b. Efferent                     d. Adherent

ANS: D  PTS: 1

244. Nerve impulses may travel _____or _____ from neuron to neuron.
   a. Chemically, electrically      c. Electrically, hormonal
   b. Chemically, hormonal         d. Electrically, voluntarily

ANS: A  PTS: 1

245. Which area of the brain is responsible for the highest mental activities?
   a. Stem                         c. Cerebrum
   b. Cerebellum                   d. Medulla oblongata

ANS: C  PTS: 1

246. The _______ area of the brain controls muscle movement.
   a. Cerebellum                   c. Stem
   b. Cerebrum                     d. Medulla oblongata

ANS: A  PTS: 1

247. Which area of the brain controls respiration and circulation?
   a. Cerebrum                     c. Medulla Oblongata
   b. Medulla Oblongata            d. Cerebellum

ANS: B  PTS: 1

248. Genes are carried on threads of living matter called
   a. Proteins                     c. Alleles
   b. Chromosomes                  d. Centromere

ANS: B  PTS: 1

249. There are _______ amino acids in the body.
   a. 48                           c. 24
   b. 12                           d. 20

ANS: D  PTS: 1

250. Which domestic pet was domesticated first?
   a. Cat                          c. Parakeet
   b. Dog                         d. Turtle

ANS: B  PTS: 1