CONTESTANT ID ______________________

NYS HIPPOLOGY 2009
Senior Written Examination
For each question, place the LETTER of the best answer on the answer sheet.

1. The diaphragm and intercostal muscles are most active during:
   a. inspiration     b. expiration
   c. both  d. neither

2. Which is the lay term for Exercise Induced Pulmonary hemorrhage?
   a. Lazix         b. bleeder
   c. wobbler       d. tying up

3. Stroke volume is:
   a. The amount of blood pumped by the ventricle
   b. the amount of blood pumped by the atrium
   c. the amount of blood traveling through the body at a given time
   d. the amount of blood a horse can lose before having a stroke

4. Which mineral is part of Vitamin B12?
   a. Iron      b. Cobalt
   c. Magnesium        d. Fluoride

5. Which processing method has a significant increase in starch digestion in feed?
   a. grinding      b. rolling
   c. cracking     d. crushing

6. What lameness results from micro fractures of the periosteal membrane?
   a. splints     b. bucked Shins
   c. ringbone        d. sidebone

7. What common livestock feedstuff is toxic to horses?
   a. silage      b. lonophores
   c. round hay bales  d. haylage

8. Mycotoxin Fumonsin is most likely to contaminate which feedstuff?
   a. corn       b. oats
   c. barley    d. rye

9. Standing in urine and wet manure will cause a breakdown of the waxy-like waterproof covering of the hoof. What is the proper name for this covering?
   a. Periople  b. Hoof Wall
   c. Perisotium d. White Line
10. Gonitis is inflammation that affects what joint?
   a. knee       b. stifle  
   c. hock       d. elbow

11. Orphan foals have a very high dietary energy requirement and should be fed how often during the first 1 - 2 weeks of life?
   a. every hour   b. every 6 hours  
   c. every 2 to 4 hours   d. every 8 hours

12. Thrush is a black, strong smelling infection of the hoof that causes destruction of the frog. What is the causative agent of Thrush?
   a. Anaerobic bacteria   b. Aerobic bacteria  
   c. Anaerobic virus      d. Aerobic virus

13. In reference to tack, what are “fittings”?
   a. girth, billets, skirt, off billet  
   b. crupper, cinch, billets  
   c. stirrups, conchos, billets  
   d. Stirrup leathers, stirrup irons and girth

14. What is the name of the part of the body, which is between the point of the hip and the last rib?
   a. coupling       b. stifle  
   c. diaphragm      d. intercostal

15. Which two internal parts of the horse are associated with “thumps”?
   a. atlas and axis   b. heart and lungs  
   c. diaphragm and heart   d. periostium and marrow

16. Legume hays are an excellent source of which macro-mineral?
   a. calcium       b. potassium  
   c. sodium       d. magnesium

17. What is the law in the U.S. that prohibits transporting livestock for a period of longer than 28 consecutive hours without unloading, feeding, watering and resting for at least five hours before resuming transportation?
   a. Equine Transport Law  
   c. Equine Welfare Order  
   b. Twenty-Eight Hour Law  
   d. Equine Transportation Welfare Law

18. Originally thought to be caused by an iron deficiency, this eating behavior problem called geophagia is characterized by the horse eating what substance?
   a. manure       b. wood  
   c. stones       d. dirt
19. When does the Estrus cycle end?
   a. one day before ovulation   b. one day after ovulation
   c. one week before ovulation   d. one week after ovulation

20. What additional piece of equipment should be connected to the stock saddle when showing western with Rommel reins specifically?
   a. breast collar   b. back cinch
   c. standing hobbles   d. mecate

21. What is the name for the action of standing with the front leg extended more forward than normal, showing lameness?
   a. stretching   b. pointing
   c. post legged   d. parked out

22. Which of the following is NOT a prohibited piece of tack or equipment in pleasure driving?
   a. tail set   b. protective leg wraps
   c. noisemakers   d. holley whip

23. What percent protein should the yearling ration contain?
   a. 8%   b. 10%
   c. 14%   d. 16%

24. With average quality grass hay, what is the hay requirement for an average 1000lb mature horse?
   a. 10lb/day   b. 15lb/day
   c. 20lb/day   d. 25lb/day

25. What is the term for the uptake of moisture from the ground and air into bales of hay?
   a. steeping effect   b. wicking effect
   c. uptake effect   d. moisture infiltration

26. In a Caslick’s operation, what anatomical part stitched to prevent the sucking of air into the inner reproductive tract?
   a. vagina   b. vulva
   c. cervix   d. oviduct

27. What is the most unique characteristic of the ulna?
   a. it’s the longest bone in the body
   b. it’s the heaviest bone in the body
   c. it’s the only irregular bone in the leg
   d. it has no marrow cavity
28. Selenium combined with ______________ has also been effective in the prevention of white muscle disease.
   a. Vitamin B  
   b. Vitamin E  
   c. Vitamin A  
   d. Vitamin K

29. A deficiency of what vitamin is not likely to happen if good quality hay of pasture is available?
   a. Vitamin A  
   b. Vitamin D  
   c. Vitamin K  
   d. Vitamin B12

30. What percentage of the phosphorous in the horse’s body is contained in the skeleton?
   a. 50%  
   b. 75%  
   c. 80%  
   d. 100%

31. Hyperirritability, glaze eyes, tenancy, and eventual collapse are signs of what mineral deficiency?
   a. potassium  
   b. Iodine  
   c. magnesium  
   d. manganese

32. Horses do not have a gallbladder to store bile salts that promote emulsification of lipids. These salts are important in lipid digestion so in the horse they are constantly secreted into what organ?
   a. large intestine  
   b. small intestine  
   c. stomach  
   d. transverse colon

33. The proper name for the sheath is what?
   a. prepuce  
   b. smegma  
   c. epididmis  
   d. none of the answers are correct

34. The large colon is divided into segments. Which is the correct order for these segments?
   a. cecum, ventral colon, dorsal colon, transverse colon, small colon, rectum  
   b. cecum, dorsal colon, ventral colon, transverse colon, small colon, rectum  
   c. ventral colon, dorsal colon, cecum, small colon, transverse colon, rectum  
   d. transverse colon, dorsal colon, ventral colon, cecum, small colon, rectum

35. What percentage of the contents on the small intestine is dry matter?
   a. 0-2%  
   b. 3-4%  
   c. 5-8%  
   d. 9-10%

36. Which of the following terms describes a mane that is cut off so part is left standing upright?
   a. pulled mane  
   b. roached mane  
   c. thinned mane  
   d. trimmed mane
37. Which is not a criteria used in semen evaluation?
   a. concentration       b. motility
   c. morphology         d. color

38. What is the angle of incidence?
   a. the angle of a horse’s shoulder
   b. the angle formed where the upper and lower incisors meet
   c. the angle formed where the fetlock joins the pastern
   d. the angle formed where the horse’s hoof meets the ground

39. Which modification on black does not have black points?
   a. buckskin       b. grulla
   c. dun           d. perlino

40. Which of the following is NOT true about the vision of a horse?
   a. has a blind spot directly behind its hindquarters
   b. has a hard time detecting movement
   c. must raise its head to see close objects
   d. takes time to adjust its eyesight in a dark stall or trailer etc.

41. What is a poultice?
   a. a type of infection that affects the horse’s heart
   b. a drawing pack used to help remove fluid from an area
   c. a skin condition that resembles hives or bee stings
   d. a blemish found on the lower inside of the horse’s hock

42. What is a Fiadore?
   a. the part of a bitless bridle that fits over a horse’s nose
   b. a saddle pad cut to fit the shape of the saddle
   c. a special knot on a hackamore
   d. wide pieces of leather along the stirrup leathers of a saddle

43. What is a corona?
   a. the part of a bitless bridle that fits over a horse’s nose
   b. a saddle pad cut to fit the shape of the saddle
   c. a special knot on a hackamore
   d. wide pieces of leather along the stirrup leathers of a saddle

44. Which of the following conditions is NOT considered a blemish?
   a. parrot mouth
   b. capped elbow
   c. splint
   d. quarter crack
45. What term is used to describe when the toe of the hind foot strikes the toe of the front foot while the horse is in motion?
   a. racking     b. forging
   c. striding     d. scalping

46. What is normal cell division called?
   a. interphase     b. mitosis
   c. telophase     d. meiosis

47. True or false: the inside of the hoof wall wears faster than the outside
   a. True
   b. False

48. Which type of fencing has the longest life expectancy?
   a. board fence     b. post and rail
   c. plastic polymer     d. high tensile wire

49. When using which type of branding does the hair grow back white?
   a. Freeze Branding     b. Hot Iron Branding
   c. Acid Branding     d. All of the above

50. The most common factor in fire safety is what?
   a. proper stable construction
   b. having a fire extinguisher near by
   c. storing hay in a separate barn
   d. having a hose with a spray wand

51. Laryngeal hemiplegia is also known as:
   a. roaring     b. bleeding
   c. heaves     d. quitter

52. What term describes rewarding a behavior as it successively approximates the desired behavior?
   a. luring     b. bribing
   c. shaping     d. manifesting

53. Which schedule of reinforcements is used once a behavior is learned?
   a. continuous     b. extinction
   c. acquisition     d. intermittent

54. Which type of stimulus naturally elicits a response, with no training necessary?
   a. unconditioned     b. conditioned
   c. positive     d. negative
55. For which disease is euthanasia the most commonly recommended treatment?
   a. Laminitis
   b. Strangles
   c. Equine Infectious Anemia
   d. Coggin’s disease

56. What is the problem with storing hay directly on concrete?
   a. spontaneous combustion
   b. contamination
   c. moisture absorption
   d. loss of hay color

57. What disease can be caused by excess carbohydrate intake?
   a. enteroliths
   b. rhabdomyolysis
   c. developmental orthopedic disease
   d. anemia

58. Where is oxygen bound on the red blood cell?
   a. nucleus
   b. hemoglobin
   c. endocrine
   d. myoglobin

59. What is the role of the platelets in the horse’s blood?
   a. oxygen carrying
   b. fighting foreign bacteria
   c. nutrient transportation
   d. clotting

60. When should a mare be vaccinated to maximize the amount of antibodies in their colostrum?
   a. 2 weeks pre-foaling
   b. 3 weeks pre-foaling
   c. 4 weeks pre foaling
   d. 6 weeks pre-foaling

61. Where is the lesion located that cause’s wobbler’s syndrome?
   a. cervical vertebrae
   b. thoracic vertebrae
   c. ulna/radius
   d. tibia/fibula

62. Which is related to increased occurrence of Developmental Orthopedic Disease in foals?
   a. lack of energy intake
   b. excessive energy intake
   c. excessive protein intake
   d. lack of concentrate

63. Which toxic chemical can horses be exposed to through sawdust or shavings?
   a. cyanide
   b. helium
   c. hydrochloric acid
   d. jugalone

64. What plant can cause photosensitivity in horses?
   a. red clover
   b. birdsfoot trefoil
   c. lespedeza
   d. alsike clover

65. Which plant causes death in horses?
   a. Yew
   b. Yellow sweet clover
   c. Skunk cabbage
   d. Locoweed
66. Which breed of horses can trace its heritage back to a horse named Hambletonian 10?
   a. Thoroughbred    b. Standard bred
   c. Arabian        d. Saddlebred

67. Which group would be creep fed?
   a. weanlings       b. foals
   c. yearlings       d. broodmares

68. What vitamin is vital for proper growth and development of the hoof?
   a. vitamin A   b. vitamin C
   c. vitamin D   d. vitamin E

69. Which of the following is not a fat-soluble vitamin?
   a. vitamin K    b. vitamin E
   c. vitamin D    d. vitamin C

70. What type of hay, when fed improperly harvested, can cause Vitamin K deficiency?
   a. timothy     b. alfalfa
   c. orchard grass d. clover

71. Which is a trace mineral?
   a. protein      b. calcium
   c. iodine       d. magnesium

72. What is the most important thing to consider in horse selection?
   a. breed          b. color
   c. conformation   d. use/purpose

73. What bones form the withers?
   a. thoracic vertebrae and scapula
   b. cervical vertebrae and scapula
   c. sacral vertebrae and scapula
   d. lumbar vertebrae and scapula

74. Which term is associated with colic?
   a. volvulus      b. vitreous
   c. viscous       d. vitiglio

75. Where is the cecum located?
   a. junction of the stomach and the small intestine
   b. junction of the small intestine and colon
   c. junction of the esophagus and the stomach
   d. junction of the colon and the rectum
76. What hormone induces parturition?
   a. progesterone     b. estrogen
   c. parturition hormone  d. oxytocin

77. What structure produces Pregnant Mare's Serum Gonadotropin (PMSG)?
   a. endometrial cups  b. corpus luteum
   c. corpus hemorrhagicum  d. myometrial tissue

78. Which of the following affect the gestation length of mares?
   a. sex of the foal  b. month of conception
   c. individual mare  d. all are correct

79. What is used to measure the concentration of antibody in the horse's system?
   a. vaccine  b. titer
   c. hematocrit  d. antigen

80. What term describes a gait that is short, quick, high, and choppy?
   a. rolling  b. snappy
   c. rack  d. trappy

81. The horse's stomach makes up what percent of its digestive tract?
   a. 8%  b. 15%
   c. 22%  d. 29%

82. Which breed is most likely to wear a tail set?
   a. Thoroughbred  b. Morgan
   c. Saddlebred  d. Appaloosa

83. Who ensures that a race meeting is conducted according to the rules?
   a. judge  b. jockeys
   c. track owner  d. steward

84. Which is a skin condition?
   a. seborrhea  b. quittor
   c. scalping  d. polypuria

85. Which nutrient is necessary for health, but can be toxic if overfed?
   a. Vitamin B  b. Vitamin C
   c. Calcium  d. Selenium

86. Which is also known as recurrent uveitis?
   a. moon blindness  b. sun blindness
   c. ictheria  d. uveoloma
87. What breed originated in colonial Virginia and Carolina’s in the early 1600’s?
   a. Arabian      b. Quarter horse
   c. Saddlebred    d. Standardbred

88. What is the major cause of infertility in mares?
   a. age      b. improper nutrition
   c. uterine infection    d. poor breeding conformation

89. Which is an example of a ginglymus joint?
   a. atlanto-axial      b. jaw
   c. shoulder    d. hock

90. What genotype in lethal?
   a. WW      b. Ww
   c. ww    d. SL

91. What temperature should collected semen be maintained at for immediate use?
   a. 90 degrees      b. 95 degrees
   c. 100 degrees    d. 105 degrees

92. What term refers to a disease that is constantly present in a geographic area?
   a. contagious      b. infectious
   c. endemic    d. empyema

93. Septicemia is what type of infection?
   a. joints      b. spinal cord
   c. brain    d. blood

94. A fecalith is__________?
   a. a hardened piece of fecal material
   b. a decomposing fetus
   c. a stone like mass that forms around a foreign object in the intestines
   d. a ball of hardened ingesta that can cause an impaction

95. What term can be used to describe an overhanging top lip?
   a. monkey mouth    b. parrot mouth
   c. elk lip    d. hare lip

96. Which formula is used to calculate genetic progress per year?
   a. generation interval x intensity factor x genetic standard deviation/ accuracy
   b. accuracy x generation interval x genetic standard deviation/intensity
   c. accuracy x intensity factor x generation interval/genetic standard deviation
   d. accuracy x intensity factor x genetic standard deviation/generation interval
97. Where would a keratoma be found?
   a. eye       b. nose
   c. hoof       d. inside hind leg

98. What can be treated with an anti-toxin?
   a. influenza       b. equine viral arthritis
   c. equine encephalomyelitis   d. tetanus

99. What type of organism causes Potomac Horse Fever?
   a. virus       b. bacteria
   c. prion       d. rickettsia

YOU MADE IT...... IT’S THE LAST QUESTION!!!!

100. How many composting bins are recommended for 5 horses?
   a. 1
   b. 2
   c. 3
   d. 4

If you have extra time. Draw a horse picture on the back of your ANSWER SHEET.