2009 NYS SENIOR WRITTEN EXAM ANSWERS

1. The diaphragm and intercostal muscles are most active during:
   a. Inspiration (HIH 810-1)
   b. expiration
   c. both
   d. neither

2. Which is the lay term for Exercise Induced Pulmonary hemorrhage?
   a. Lazix
   b. bleeder (HIH 810-2)
   c. wobbler
   d. tying up

3. Stroke volume is:
   a. The amount of blood pumped by the ventricle (HIH 830-1)
   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 (Lewis, 39)
   c. Magnesium
   d. Fluoride

5. Which processing method has a significant increase in starch digestion in feed?
   a. grinding (Lewis, 77)
   b. rolling
   c. cracking
   d. crushing

6. What lameness results from micro fractures of the periosteal membrane?
   a. splints
   b. Bucked Shins (Lewis, 235)
   c. ringbone
   d. sidebone

7. What common livestock feedstuff is toxic to horses?
   a. silage
   b. ionophores (Lewis, 361)
   c. Round hay bales
   d. haylage
8. Mycotoxin Fumonsin is most likely to contaminate which feedstuff?
   a. corn (Lewis, 349)
   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 (Lewis pg 178)
   b. Hoof Wall
   c. Perisotium
   d. White Line

10. Gonitis is inflammation that affects what joint?
    a. Knee
    b. stifle (The Horse, 164)
    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 (Kainer plate 69, Lewis pg 275)
    d. every 8 hours

12. Thrush is a black, strong smelling infection of the hoof that causes destruction of the frog. Is it caused by aerobic or anaerobic bacteria?
    a. Anaerobic bacteria (YLM 334-1)
    b. Aerobic bacteria

13. In reference to tack, what are “fittings”?
    a. girth, billets, skirt, off billet
    b. crupper, sinch, billets
    c. stirrups, conchos, billets
    d. Stirrup leathers, stirrup irons and girth (HIH, p. 1100-3)
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, loin (Color Atlas, Evans p. 142)
   b. Stifle
   c. diaphragm
   d. intercostal

15. Which two internal part of the horse are associated with “thumps”?
   a. atlas and axis
   b. heart and lungs
   c. The diaphragm and the heart (FCH, p. 213)
   d. peristium and marrow

16. Legume hays are an excellent source of which macro-mineral?
   A. Calcium (Evans, p. 258)
   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
   b. Twenty-Eight Hour Law (FCH, p. 407)
   c. Equine Welfare Order
   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 (Evans, p. 303)

19. When does the Estrus (E-S-T-R-U-S) cycle end?
   a. one day before ovulation
   b. one day after ovulation (AYHCLM, p.A336-1L & Evans, p. 27)
   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 (4H, H&H, 10)**
   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 (4H, H&H, 47)**
   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 (4H, HB, 42)

23. What percent protein should the yearling ration contain?
   a. 8%
   b. 10%
   c. **14% (The Horse, 267)**
   d. 16%

24. With average quality grass hay, what is the hay requirement for an average 1000lb mature horse?
   a. 15lb/day (HIH, 420-2)
   b. 25lb/day
   c. 10lb/day
   d. 20lb/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 (HIH, 710-5)**
   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 (The Horse, 410)
   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 (The Horse, 684)

28. Selenium combined with _______________ has also been effective in the prevention of white muscle disease.
   a. Vitamin B
   b. Vitamin E (The Horse, 241)
   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 (The Horse, 238)
   b. Vitamin D
   c. lead
   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% (The Horse, 228)
   d. 100%

31. Hyperirritability, glaze eyes, tenancy, and eventual collapse are signs of what mineral deficiency?
   a. potassium
   b. iodine
   c. magnesium (The Horse, 230)
   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 (The Horse, 192)
   c. stomach
   d. transverse colon

33. The proper name for the sheath is what?
   a. prepuce (The Horse, 359)
   b. smegma
   c. epididmis
   d. none of the above

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 (The Horse, 192)
   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% (The Horse, 192)
   d. 9-10%

36. When the penis of a stallion is in the relaxed state, approximately how long is it?
   a. 50 cm (The Horse, 358)
   b. 45 cm
   c. 20 cm
   d. 60 cm

37. Which answer are not criteria used in semen evaluation?
   a. volume/concentration
   b. motility
   c. morphology
   d. color (The Horse, 365)
38. lack of what color on a chestnuts legs is always a clear cut distinction between blacks and chestnuts?
   a. white
   b. black (The Horse, 474)
   c. seal brown
   d. rust

39. Which modification on black does not have black points?
   a. buckskin
   b. grulla
   c. dun
   d. perlino (The Horse, 473)

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 (The Horse, 721)

48. Which type of fencing has the longest life expectancy?
   a. Board fence   b. Post and rail
   c. plastic polymer (The Horse, 768)  
   c. high tensile wire

49. When using which type of branding does the hair grow back white?
   a. Freeze Branding (The Horse, 809)  
   b. Hot Iron Branding  
   c. Acid Branding

50. The most common factor in fire safety is what?
   a. proper stable construction (The Horse, 820)  
   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 (Lewis, 402)  
   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 (Evans, 669)  
   d. manifesting
53. Which schedule of reinforcements is used once a behavior is learned?
   a. continuous
   b. extinction
   c. acquisition
   d. intermittent (Evans, 668)

54. Which type of stimulus naturally elicits a response, with no training necessary?
   a. unconditioned (Evans, 661)
   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 (HIH 630-1)
   d. Coggin’s disease

56. What is the problem with storing hay directly on concrete?
   a. spontaneous combustion
   b. contamination
   c. moisture absorption (HIH 750-9)
   d. loss of hay color

57. What disease can be caused by excess carbohydrate intake?
   a. enteroliths
   b. rhabdomyolysis (HIH 770-3)
   c. developmental orthopedic disease
   d. anemia

58. Where is oxygen bound on the red blood cell?
   a. nucleus
   b. hemoglobin (HIH 810-1)
   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 (HIH 830-1)
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 (Lewis)
   d. 6 weeks pre-foaling

61. Where is the lesion located that cause’s wobbler’s syndrome?
   a. cervical vertebrae (Lewis, 279)
   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 (Lewis, 286)
   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 (Lewis, 322)

64. What plant can cause photosensitivity in horses?
   a. red clover
   b. birdsfoot trefoil
   c. lespedeza
   d. alsike clover (Lewis, 314)

65. Which plant causes death in horses?
   a. Yew (Lewis, 334)
   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 (HIH 171B-1)
   c. Arabian
   d. Saddlebred
67. Which group would be creep fed?  
   a. weanlings  
   b. foals (Evans, 264)  
   c. yearlings  
   d. broodmares

68. What vitamin is vital for proper growth and development of the hoof?  
   a. vitamin A (HIH 505-2)  
   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 (HIH 760-10)

70. What type of hay, when fed improperly harvested, can cause Vitamin K deficiency?  
   a. timothy  
   b. alfalfa  
   c. orchard grass  
   d. clover (Evans, 256)

71. Which is a trace mineral?  
   a. protein  
   b. calcium  
   c. iodine (Evans, 231)  
   d. magnesium

72. What is the most important thing to consider in horse selection?  
   a. breed  
   b. color  
   c. conformation  
   d. use/purpose (Evans, 132)

73. What bones form the withers?  
   a. thoracic vertebrae and scapula (Evans, 151)  
   b. cervical vertebrae and scapula  
   c. sacral vertebrae and scapula  
   d. lumbar vertebrae and scapula
74. Which term is associated with colic?
   a. volvulus (Dict. 285)
   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 (Evans, 192)
   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 (Evans, 345)
   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 of the above (Evan, 343)

79. What is used to measure the concentration of antibody in the horse’s system?
   a. vaccine
   b. titer (Dict. 269)
   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 (Evans, 181)

81. The horse’s stomach makes up what percent of its digestive tract?
   a. 8% (HIH 710-2)
   b. 15%
   c. 22%
   d. 29%
82. Which breed is most likely to wear a tail set?
   a. Thoroughbred
   b. Morgan
   c. Saddlebred (Dict. 262)
   d. Appaloosa

83. Who ensures that a race meeting is conducted according to the rules?
   a. judge
   b. jockeys
   c. track owner
   d. steward (Dict. 255)

84. Which is a skin condition?
   a. seborrhea (Dict. 240)
   b. seedy toe
   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 (Dict. 24)

86. Which is also known as recurrent uveitis?
   a. moon blindness (Dict. 230)
   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 (HIH 1688-1)
   c. saddlebred
   d. standardbred

88. What is the major cause of infertility in mares?
   a. age
   b. improper nutrition
   c. uterine infection (HIH 940-1)
   d. poor breeding conformation
89. Which is an example of a ginglymus joint?
   a. atlanto-axial
   b. jaw
   c. shoulder
   d. hock (Dict. 120)

90. What genotype is lethal?
   a. WW (Evans, 483)
   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 (Dict. 91)
   d. empyema

93. Septicemia is what type of infection?
   a. joints
   b. spinal cord
   c. brain
   d. blood (Evans, 429)

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 ingesta that can cause an impaction (Dict. 105)

95. What term can be used to describe an overhanging top lip?
   a. monkey mouth
   b. parrot mouth
   c. elk lip (Dict. 90)
   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
   (Evans, 557)

97. Where would a keratoma be found?
   a. eye
   b. nose
   c. hoof (Dict. 161)
   d. inside hind leg

98. What can be treated with an anti-toxin?
   a. influenza
   b. equine viral arthritis
   c. equine encephalomyelitis
   d. tetanus (Evans, 601)

99. What type of organism causes Potomac Horse Fever?
   a. virus
   b. bacteria
   c. prion
   d. rickettsia (HIH, 650-1)

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

100. How many composting bins are recommended for 5 horses?
   a. 1
   b. 2 (HIH 365-3)
   c. 3
   d. 4