

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?
- corn (Lewis, 349)**
 - Oats
 - Barley
 - 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?
- Periople (Lewis pg 178)**
 - Hoof Wall
 - Perisotium
 - White Line
10. Gonitis is inflammation that affects what joint?
- Knee
 - stifle (The Horse, 164)**
 - hock
 - 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?
- Every hour
 - every 6 hours
 - Every 2 to 4 hours (Kainer plate 69, Lewis pg 275)**
 - 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?
- Anaerobic bacteria (YLM 334-1)**
 - Aerobic bacteria
13. In reference to tack, what are "fittings"?
- girth, billets, skirt, off billet
 - crupper, sinch, billets
 - stirrups, conchos, billets
 - 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?
- Coupling, loin**(Color Atlas, Evans p. 142)
 - Stifle
 - diaphragm
 - intercostal
15. Which two internal part of the horse are associated with “thumps”?
- atlas and axis
 - heart and lungs
 - The diaphragm and the heart**(FCH, p. 213)
 - periostium and marrow
16. Legume hays are an excellent source of which macro-mineral?
- Calcium** (Evans, p. 258)
 - Potassium
 - sodium
 - 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?
- Equine Transport Law
 - Twenty-Eight Hour Law** (FCH, p. 407)
 - Equine Welfare Order
 - 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?
- manure
 - wood
 - stones
 - Dirt** (Evans, p. 303)
19. When does the Estrus (E-S-T-R-U-S) cycle end?
- one day before ovulation
 - one day after ovulation** (AYHCLM, p.A336-1L & Evans, p. 27)
 - one week before ovulation
 - one week after ovulation

20. What additional piece of equipment should be connected to the stock saddle when showing western with rommel reins specifically?
- breast collar
 - back cinch
 - standing hobbles (4H, H&H, 10)**
 - mecate
21. What is the name for the action of standing with the front leg extended more forward than normal, showing lameness?
- stretching
 - pointing (4H, H&H, 47)**
 - post legged
 - parked out
22. Which of the following is NOT a Prohibited piece of tack or equipment in pleasure driving?
- tail set
 - protective leg wraps
 - noisemakers
 - Holley whip (4H, HB, 42)**
23. What percent protein should the yearling ration contain?
- 8%
 - 10%
 - 14% (The Horse, 267)**
 - 16%
24. With average quality grass hay, what is the hay requirement for an average 1000lb mature horse?
- 15lb/day (HIH, 420-2)**
 - 25lb/day
 - 10lb/day
 - 20lb/day
25. What is the term for the uptake of moisture from the ground and air into bales of hay?
- steeping effect
 - wicking effect (HIH, 710-5)**
 - uptake effect
 - 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?
- large intestine
 - small intestine (The Horse, 192)**
 - stomach
 - transverse colon
33. The proper name for the sheath is what?
- prepuce (The Horse, 359)**
 - smegma
 - epididmis
 - none of the above
34. The large colon is divided into segments. Which is the correct order for these segments?
- cecum, ventral colon, dorsal colon, transverse colon, small colon, rectum (The Horse, 192)**
 - cecum, dorsal colon, ventral colon, transverse colon, small colon, rectum
 - ventral colon, dorsal colon, cecum, small colon, transverse colon, rectum
 - transverse colon, dorsal colon, ventral colon, cecum, small colon, rectum
35. What percentage of the contents on the small intestine is dry matter?
- 0-2%
 - 3-4%
 - 5-8% (The Horse, 192)**
 - 9-10%
36. When the penis of a stallion is in the relaxed state, approximately how long is it?
- 50 cm (The Horse, 358)**
 - 45 cm
 - 20 cm
 - 60 cm
37. Which answer are not criteria used in semen evaluation?
- volume/concentration
 - motility
 - morphology
 - color (The Horse, 365)**

38. lack of what color on a chestnuts legs is always a clear cut distinction between blacks and chestnuts?
- white
 - black (The Horse, 474)**
 - seal brown
 - rust
39. Which modification on black does not have black points?
- buckskin
 - grulla
 - dun
 - perlino (The Horse, 473)**
40. Which of the following is **NOT** true about the vision of a horse?
- has a blind spot directly behind its hindquarters
 - has a hard time detecting movement
 - must raise its head to see close objects**
 - takes time to adjust its eyesight in a dark stall or trailer etc.
41. What is a poultice?
- a type of infection that affects the horse's heart
 - a drawing pack used to help remove fluid from an area**
 - a skin condition that resembles hives or bee stings
 - a blemish found on the lower inside of the horse's hock
42. What is a Fiadore?
- the part of a bitless bridle that fits over a horse's nose
 - a saddle pad cut to fit the shape of the saddle
 - a special knot on a hackamore**
 - wide pieces of leather along the stirrup leathers of a saddle
43. What is a corona?
- the part of a bitless bridle that fits over a horse's nose
 - a saddle pad cut to fit the shape of the saddle**
 - a special knot on a hackamore
 - wide pieces of leather along the stirrup leathers of a saddle
44. Which of the following conditions is **NOT** considered a blemish?
- parrot mouth**
 - capped elbow
 - splint
 - 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)**
 - d. 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?
- continuous
 - extinction
 - acquisition
 - intermittent (Evans, 668)**
54. Which type of stimulus naturally elicits a response, with no training necessary?
- unconditioned (Evans, 661)**
 - conditioned
 - positive
 - negative
55. For which disease is euthanasia the most commonly recommended treatment?
- laminitis
 - strangles
 - Equine Infectious Anemia (HIH 630-1)**
 - Coggin's disease
56. What is the problem with storing hay directly on concrete?
- spontaneous combustion
 - contamination
 - moisture absorption (HIH 750-9)**
 - loss of hay color
57. What disease can be caused by excess carbohydrate intake?
- enteroliths
 - rhabdomyolysis (HIH 770-3)**
 - developmental orthopedic disease
 - anemia
58. Where is oxygen bound on the red blood cell?
- nucleus
 - hemoglobin (HIH 810-1)**
 - endocrine
 - myoglobin
59. What is the role of the platelets in the horse's blood?
- oxygen carrying
 - fighting foreign bacteria
 - nutrient transportation
 - clotting (HIH 830-1)**

60. When should a mare be vaccinated to maximize the amount of antibodies in their colostrum?
- 2 weeks pre-foaling
 - 3 weeks pre-foaling
 - 4 weeks pre foaling (Lewis)**
 - 6 weeks pre-foaling
61. Where is the lesion located that cause's wobbler's syndrome?
- cervical vertebrae (Lewis, 279)**
 - thoracic vertebrae
 - ulna/radius
 - tibia/fibula
62. Which is related to increased occurrence of Developmental Orthopedic Disease in foals?
- lack of energy intake
 - excessive energy intake (Lewis, 286)**
 - excessive protein intake
 - lack of concentrate
63. Which toxic chemical can horses be exposed to through sawdust or shavings?
- cyanide
 - helium
 - hydrochloric acid
 - jugalone (Lewis, 322)**
64. What plant can cause photosensitivity in horses?
- red clover
 - birdsfoot trefoil
 - lespedeza
 - alsike clover (Lewis, 314)**
65. Which plant causes death in horses?
- Yew (Lewis, 334)**
 - Yellow sweet clover
 - Skunk cabbage
 - Locoweed
66. Which breed of horses can trace its heritage back to a horse named Hambletonian 10?
- Thoroughbred
 - Standard bred (HIH 171B-1)**
 - Arabian
 - 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?
- volvulus (Dict. 285)**
 - vitreous
 - viscous
 - vitiglio
75. Where is the cecum located?
- junction of the stomach and the small intestine
 - junction of the small intestine and colon (Evans, 192)**
 - junction of the esophagus and the stomach
 - junction of the colon and the rectum
76. What hormone induces parturition?
- progesterone
 - estrogen
 - parturition hormone
 - oxytocin**
77. What structure produces Pregnant Mare's Serum Gonadotropin (PMSG)?
- endometrial cups (Evans, 345)**
 - corpus luteum
 - corpus hemorrhagicum
 - myometrial tissue
78. Which of the following affect the gestation length of mares?
- sex of the foal
 - month of conception
 - individual mare
 - all of the above (Evan, 343)**
79. What is used to measure the concentration of antibody in the horse's system?
- vaccine
 - titer (Dict. 269)**
 - hematocrit
 - antigen
80. What term describes a gait that is short, quick, high, and choppy?
- rolling
 - snappy
 - rack
 - trappy (Evans, 181)**
81. The horse's stomach makes up what percent of its digestive tract?
- 8% (HIH 710-2)**
 - 15%
 - 22%
 - 29%

82. Which breed is most likely to wear a tail set?
- Thoroughbred
 - Morgan
 - Saddlebred (Dict. 262)**
 - Appaloosa
83. Who ensures that a race meeting is conducted according to the rules?
- judge
 - jockeys
 - track owner
 - steward (Dict. 255)**
84. Which is a skin condition?
- seborrhea (Dict. 240)**
 - seedy toe
 - scalping
 - polypuria
85. Which nutrient is necessary for health, but can be toxic if overfed?
- Vitamin B
 - Vitamin C
 - Calcium
 - Selenium (Dict. 24)**
86. Which is also known as recurrent uveitis?
- moon blindness (Dict. 230)**
 - sun blindness
 - icteria
 - uveoloma
87. What breed originated in colonial Virginia and Carolina's in the early 1600's?
- Arabian
 - Quarter horse (HIH 1688-1)**
 - saddlebred
 - standardbred
88. What is the major cause of infertility in mares?
- age
 - improper nutrition
 - uterine infection (HIH 940-1)**
 - poor breeding conformation

89. Which is an example of a ginglymus joint?
- atlanto-axial
 - jaw
 - shoulder
 - hock (Dict. 120)**
90. what genotype is lethal?
- WW (Evans, 483)**
 - Ww
 - ww
 - SL
91. What temperature should collected semen be maintained at for immediate use?
- 90 degrees
 - 95 degrees
 - 100 degrees**
 - 105 degrees
92. What term refers to a disease that is constantly present in a geographic area?
- contagious
 - infectious
 - endemic (Dict. 91)**
 - empyema
93. Septicemia is what type of infection?
- joints
 - spinal cord
 - brain
 - blood (Evans, 429)**
94. A fecolith is_____?
- a hardened piece of fecal material
 - a decomposing fetus
 - a stone like mass that forms around a foreign object in the intestines
 - a ball of ingesta that can cause an impaction (Dict. 105)**
95. What term can be used to describe an overhanging top lip?
- monkey mouth
 - parrot mouth
 - elk lip (Dict. 90)**
 - Hare lip

96. Which formula is used to calculate genetic progress per year?
- generation interval x intensity factor x genetic standard deviation/ accuracy
 - Accuracy x generation interval x genetic standard deviation/intensity
 - accuracy x intensity factor x generation interval/genetic standard deviation
 - accuracy x intensity factor x genetic standard deviation/generation interval

(Evans, 557)

97. Where would a keratoma be found?

- eye
- nose
- hoof (Dict. 161)
- inside hind leg

98. What can be treated with an anti-toxin?

- influenza
- equine viral arthritis
- equine encephalomyelitis
- tetanus (Evans, 601)

99. What type of organism causes Potomac Horse Fever?

- virus
- bacteria
- prion
- rickettsia (HIH, 650-1)

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

100. How many composting bins are recommended for 5 horses?

- 1
- 2 (HIH 365-3)
- 3
- 4