

2016 State Horse Bowl Contest

Senior Division Round 1

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: At what age is the Galvayne's groove half way down the incisor?**
A: 15 years old
S: Evans 2nd (93)
- C2 2) Q: What grain is most commonly overfed to horses?**
A: Corn
S: Lewis 2nd (71)
- C3 3) Q: What kind of bedding is very commonly used in foaling stalls?**
A: Straw
S: AYHC 1st (350-1)
- C4 4) Q: Where are the majority of the nutrients stored in hay?**
A: Leaves
S: AYHC 1st (740-6)
- C1 5) Q: What is the primary purpose of tendons?**
A: They attach muscle to bone
S: Evans 2nd (90)
- C2 6) Q: What is a common problem in foals, particularly when the mare has her foal heat?**
A: Diarrhea
S: Evans2 (428)

- C3 7) Q: What is the muscular tube that extends from the pharynx to the stomach?**
A: Esophagus
S: AYHC 1st (705-1)
- C4 8) Q: What word is defined as any deviation in structure or function that interferes with the horse's intended use or performance?**
A: Unsoundness
S: AYHC 1st (230-1)
- C1 9) Q: What is the ideal angle of the shoulder?**
A: Approximately 45 to 50 degrees
S: AYHC-YL (223-2)
- C2 10) Q: What is the difference between the skin color of a white horse and a gray horse?**
A: A white horse has pink skin and a gray horse has dark colored or pigmented skin
S: Griffiths (45)
- C3 11) Q: Describe the condition bench kneed.**
A: The cannon bones are set too far to the outside of the knee
S: AYHC 1st (203-3)
- C4 12) Q: What must a horse do with its head to see faraway objects?**
A: Lower it
S: AYHC 1st (1220-1)

BEGIN TOSS UP QUESTIONS

- 13) Q: What does the term "phenotype" mean?**
A: What the horse looks like
S: Griffiths (91)

- 14) Q: What joint is located between the cannon and pastern bones?**
A: Fetlock joint
S: Evans 2nd (150)

TOSS UP WITH A BONUS ATTACHED

- 15) Q: What do you call a mare that has been bred the previous breeding season but failed to conceive or to carry a foal to full term?**
A: Barren
S: Lewis 2nd (382)

BONUS QUESTION

- 16) Q: Give 3 reasons for having your horse shod.**
A: 1) increase traction; 2) action modification; 3) therapeutic reasons;
4) correct conformational faults
S: Evans 2nd (727) & AYHC 1st (515-3)
- 17) Q: What is the function of a butt bar?**
A: It is a safety device for the horse to brace against in case the back door comes open in a horse trailer
S: AYHC 1st (201-1)
- 18) Q: Name two horse breeds that have feathering on their legs.**
A: 1) Clydesdale; 2) Friesian; 3) Shire
S: Newhor (59, 115, 243)
- 19) Q: The distance and/or time from when a particular foot leaves the ground until that same foot strikes the ground again is referred to as what?**
A: Stride
S: Evans 2nd (169)

TOSS UP WITH A BONUS ATTACHED

20) Q: Each horse in a reining class automatically begins the pattern with what score?

A: 70

S: AYHC 1st (183D-1)

BONUS QUESTION

21) Q: Name the 3 basic dark coat colors for horses.

A: 1) Black; 2) bay; 3) chestnut or sorrel

S: Griffiths (39)

22) Q: What is the length of gestation of a horse in days?

A: 335 to 342 days

S: AYHC 1st (930-4)

23) Q: Name the organ that provides the pumping action for the cardiovascular system.

A: Heart

S: Evans 2nd (111)

24) Q: What term applies to a horse that belongs to a specific breed and has "papers" to document its ancestry?

A: Registered or purebred

S: AYHC 1st (110-5)

TOSS UP WITH A BONUS ATTACHED

25) Q: What is the name for the Western version of a standing martingale?

A: Tie-down

S: AYHC 1st (1100-12)

BONUS QUESTION

- 26) **Q: Give 3 names for the condition where the upper jaw extends over the lower jaw.**
A: 1) Parrot mouth; 2) prognathism; 3) overbite; 4) overshot jaw
S: Lewis 2nd (400)
- 27) **Q: What is the zoological species of the horse?**
A: *Equus caballus*
S: Griffiths (15)
- 28) **Q: What is the slowest racing gait?**
A: Trot
S: Newhor (275)
- 29) **Q: What breed of horse is registered by the Jockey Club?**
A: Thoroughbred
S: Evans 2nd (21)
- 30) **Q: The primary weight of the horse is supported by what part of the hoof?**
A: Wall
S: AYHC 1st (505-4)
- 31) **Q: What is another term for fats?**
A: Lipids
S: Griffiths (143)
- 32) **Q: What is the proper term for the bulge on the head of an Arabian horse?**
A: Jibbah
S: Newhor (157)

END OF ROUND 1

2016 State Horse Bowl Contest Senior Division Round Two

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: What is the most common breed of draft horse in America?**
A: Belgian
S: AYHC-YL (110-1)
- C2 2) Q: The sex of the foal is determined by what parent?**
A: Sire
S: Griffiths (74)
- C3 3) Q: What is the name for fermented forage plants?**
A: Silage
S: Lewis 2nd (403)
- C4 4) Q: According to a 2004 American Horse Council study, there are approximately 9 million horses in the United States. Close to 4 million of those horses are used for what purpose?**
A: Recreation
S: Griffiths (1)
- C1 5) Q: Name one place that you can take the horse's pulse.**
A: 1) With a stethoscope near the heart, under the elbow; 2) manually on the facial artery just inside the jaw or cheek groove
S: Griffiths (160)
- C2 6) Q: The Connemara pony is famed for what ability?**
A: Jumping
S: Newhor (67)

- C3 7) Q: Why were the tails of driving and working horses often docked?**
A: To prevent the tail from interfering with the driving lines
S: Evans 2nd (97)
- C4 8) Q: The speed of the horse is determined by what 2 factors?**
A: Stride frequency and length
S: Evans 2nd (169)
- C1 9) Q: When traveling out of state with your horse, what are the 2 mandatory documents you must carry with your horse at all times?**
A: Proof of a negative Coggins test and a health certificate no more than thirty (30) days old
S: AYHC 1st (1150-2)
- C2 10) Q: How many bones make up the horse's skeleton?**
A: 205
S: Evans 2nd (90)
- C3 11) Q: Name one of the most commonly reported causes of failure of passive transfer in foals.**
A: 1) Leakage of colostrum prior to parturition; 2) failure by the mare to produce adequate amounts of colostrum; 3) failure of the foal to nurse during the first 12 hours of life
S: AYHC 1st (975-4)
- C4 12) Q: Approximately how much water should a horse consume every day?**
A: 5 to 10 gallons
S: Griffiths (114)

BEGIN TOSS UP QUESTIONS

13) Q: Name the color of horses that is a form of dun with a red or flaxen mane and tail, a red dorsal stripe, and often has red zebra stripes on the legs and a transverse stripe over the withers.

A: Red dun

S: Newhor (230)

14) Q: What paired organ of the horse is made up lobes?

A: Lung/Lungs

S: Evans 2nd (105)

TOSS UP WITH A BONUS ATTACHED

15) Q: What is a horse who has never won a race called?

A: Maiden

S: Newhor (174)

BONUS QUESTION

16) Q: Name 3 sensitive spots on a horse's body.

A: 1) Head; 2) mouth; 3) inside the mouth including the teeth; 4) ears; 5) side of the neck; 6) muzzle, including the nose; 7) withers; 8) girth area; 9) rib area; 10) flank area; 11) back; 12) lower legs

S: Griffiths (65)

17) Q: What portion of the digestive tract has the greatest capacity?

A: Large colon

S: Griffiths (113)

18) Q: In miles, how long is an 8 furlong race?

A: 1 mile

S: Newhor (116)

19) Q: What is the stay apparatus?

A: A system of muscles, tendons, and ligaments in the body and legs that has the following three functions: helps support the horse while standing, acts to reduce concussion during movement, and prevents overextension

S: Newhor (254)

TOSS UP WITH A BONUS ATTACHED

20) Q: Which body system of the horse provides immediate response to the environment?

A: Nervous system

S: Evans 2nd (119)

BONUS QUESTION

21) Q: What are the 4 identifiable characteristics of the Appaloosa?

A: 1) Coat pattern; 2) mottled skin; 3) vertically striped hooves; 4) white sclera circling the eye

S: AYHC 1st (152B-1)

22) Q: What is meant by the term "medial?"

A: A position closer to the midline of the body or of a structure

S: Newhor (178)

23) Q: What are the 2 basic classifications of forages?

A: Legumes and grasses

S: AYHC 1st (760-1)

24) Q: In what way is Equine Infectious Anemia (EIA) transmitted?

A: Bodily secretions such as blood, saliva, urine, and milk

S: Griffiths (176)

TOSS UP WITH A BONUS ATTACHED

- 25) Q: What is the small snaffle bit found in a Weymouth bridle?**
A: Bridoon
S: Newhor (39)

BONUS QUESTION

- 26) Q: Name 3 causes of an underweight horse.**
A: 1) Parasites; 2) lactation; 3) too much exercise; 4) not enough feed;
5) poor teeth; 6) competition for food; 7) malabsorption
S: Evans 2nd (295)
- 27) Q: How many amino acids are there?**
A: 22
S: Griffiths (117)
- 28) Q: What color breed carries the gene for Lethal White Foal Syndrome?**
A: Paint or Pinto
S: Griffiths (98)
- 29) Q: Name an activity that occurs in the testicles.**
A: Testosterone production, spermatogenesis
S: AYHC 1st (980-3)
- 30) Q: What is the maximum heart rate of a horse?**
A: 230 beats per minute
S: AYHC 1st (830-2)
- 31) Q: What are vertical cracks in the hoof wall called?**
A: Sand cracks
S: AYHC 1st (540-2)
- 32) Q: What is dystocia?**
A: Difficulty giving birth
S: Newhor (87)

END OF ROUND 2

2016 State Horse Bowl Contest Senior Division Round Three

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: Name the 2 bones that make up the forearm.**
A: Radius and ulna
S: Evans 2nd (98)
- C2 2) Q: In regards to insurance, what does "ASD" stand for?**
A: Accident, Sickness, Death
S: AYHC 1st (1340-3)
- C3 3) Q: What permanent teeth erupt at 2 ½ years of age?**
A: Permanent central incisors
S: AYHC 1st (405-1)
- C4 4) Q: When measuring equines, what is the one surface that should never be used?**
A: Dirt or gravel
S: Griffiths (27)
- C1 5) Q: Name the 3 regions of the hoof wall.**
A: Toe, quarter, and heel
S: Kainer (24)
- C2 6) Q: When traveling long distances, how often should a horse be offered water?**
A: Every 3 to 4 hours
S: AYHC-YL (304-2)

- C3 7) Q: What is endocrinology?**
A: The study of hormones and their effects
S: AYHC 1st (910-5)
- C4 8) Q: What percentage of its body weight should a horse consume in forage dry matter per day?**
A: 1%
S: AYHC 1st (730-1)
- C1 9) Q: What is the difference between an oil and a fat?**
A: An oil has a melting temperature lower than room temperature and fats have a melting temperature above room temperature (oils are liquid at room temperature and fats are solid at room temperature)
S: Lewis 2nd (18)
- C2 10) Q: What is it called when a horse is extremely swaybacked?**
A: Lordosis
S: Newhor (172)
- C3 11) Q: What is a patten shoe typically used for?**
A: It is used to elevate the heels of a horse that is confined to stall rest
S: AYHC 1st (515-5)
- C4 12) Q: What is the largest nerve in the horse's body?**
A: Sciatic nerve
S: AYHC 1st (705)

BEGIN TOSS UP QUESTIONS

- 13) Q: Most foundation Quarter Horses trace back to what Thoroughbred that was imported into Virginia in 1752?**
A: Janus
S: Newhor (157)

14) Q: Who were the first breeders of the Arabian?

A: The Bedouins (Nomadic tribesmen)

S: AYHC 1st (153B-1)

TOSS UP WITH A BONUS ATTACHED

15) Q: Identify this breed from the following description: This breed's progeny was essential in the development of the Standardbred, American Saddlebred and Quarter Horse breeds. The US Department of Agriculture had a farm in Middlebury, Vermont that was used to preserve and improve this breed. The horse is known for its all-purpose ability on the farm or in the show ring, and is the only breed named after a single horse.

A: Morgan

S: Evans 2nd (36)

BONUS QUESTION

16) Q: Give 2 reasons barn managers prefer giving water in buckets over commercial waterers.

A: 1) A bucket is more easily cleaned; 2) water consumption can be observed; 3) water can easily be withheld if necessary

S: Evans 2nd (778)

17) Q: How can you determine if there is inflammation in your horse's foot?

A: Take the digital pulse near the sesamoid bones; a strong pulse or heat indicates inflammation

S: AYHC 1st (505-5)

18) Q: What are added to mouth pieces of bits to create leverage?

A: Shanks

S: AYHC 1st (1100-6)

19) Q: What is the most severe bit used in Western riding?

A: Spade bit

S: AYHC 1st (1100-10)

TOSS UP WITH A BONUS ATTACHED

20) Q: Horses with heat stroke must immediately receive first aid treatment that focuses on reducing the horse's body temperature quickly. Give 1 way this can be done.

A: 1) Hosing the horse down and scraping repeatedly; 2) applying ice to the horse's topline

S: AYHC 1st (410-1 & 2)

BONUS QUESTION

21) Q: What are 2 symptoms specific to tetanus in the horse?

A: 1) Trismus (locked jaw); 2) hyperresponsiveness to light, touch, or sounds; 3) prolapse of the third eyelids; 4) gait and neck stiffness; 5) muscle spasms

S: AYHC 1st (645-1)

22) Q: What management practice can be used to increase testicular activity in stallions?

A: Placing stallions under artificial light

S: AYHC 1st (920-3)

23) Q: What is ossification?

A: The transition from cartilage to bone

S: Evans 2nd (265)

24) Q: How long can a foal absorb the antibodies in colostrum?

A: Up to 36 hours after birth

S: Evans 2nd (197)

TOSS UP WITH A BONUS ATTACHED

- 25) Q: What does it mean that mares are seasonally polyestrous?**
A: They have several estrous cycles during the breeding season from April to October
S: Kainer (71)

BONUS QUESTION

- 26) Q: List the 4 major sections of the large intestine.**
A: Cecum, Large Colon, Small Colon, Rectum
S: Griffiths (113)
- 27) Q: When a horse is cantering, what is it called when all four feet are off the ground?**
A: Period of suspension
S: Griffiths (74)
- 28) Q: What is the average length of stride in feet of the trot or jog?**
A: 8 to 9 feet
S: Griffiths (72)
- 29) Q: According to the zoological classification of the modern horse, what class does the horse belong to?**
A: Mammalia
S: Griffiths (15)
- 30) Q: During what period of gestation does the fetus grow most rapidly?**
A: The last 3 months of gestation or the last trimester
S: Evans 2nd (271)
- 31) Q: The last 10 pairs of ribs that are not connected to the sternum are known as what?**
A: False ribs
S: Newhor (104)

32) Q: During foaling, what is the term for when the fetus' rump or hind feet are presented first in the birth canal?

A: Breech birth

S: Newhor (38)

END OF ROUND 3

2016 State Horse Bowl Contest

Senior Division Round Four

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: Ideally, at what stage should timothy hay be harvested?**
A: Flowering or boot stage
S: Lewis 2nd (69)
- C2 2) Q: What is the difference between an extended walk and a free walk?**
A: Extended walk - rider maintains contact with the horse's mouth through the reins; free walk - rider allows a long loose rein & gives horse full head and neck freedom
S: Evans 2nd (174)
- C3 3) Q: What is the preferred plant-source protein supplement for growing horses?**
A: Soybean meal
S: Lewis 2nd (83)
- C4 4) Q: Where is the masseter muscle located?**
A: In the jaw
S: Newhor (176)
- C1 5) Q: What is the average pulse rate of a foal at rest?**
A: 80 to 90 beats per minute
S: Griffiths (155)
- C2 6) Q: What breed association accepts ponies taller than 14.2 hands high in their breed association?**
A: Welsh Pony Breed Association
S: Griffiths (28)

- C3 7) Q: What is the bony prominence at the top of the skull that rises between the ears?**
A: Occipital crest
S: Newhor (194)
- C4 8) Q: In what year did Secretariat win the Triple Crown?**
A: 1973
S: Evans 2nd (22)
- C1 9) Q: The endocrine system contains a number of ductless glands. What do these glands produce?**
A: Hormones
S: Newhor (92)
- C2 10) Q: What is the most common infectious respiratory disease of the horse?**
A: Influenza
S: AYHC-YL (101-103)
- C3 11) Q: One of the main goals of wound treatment is to control hemorrhage. What is one benefit that a hemorrhage provides?**
A: It flushes the wound free of contaminating material
S: AYHC 1st (440-2)
- C4 12) Q: For a horse to breed efficiently, a mare must have a minimum body condition score of what on the Henneke scoring system?**
A: 5.5 to 7
S: AYHC-YL (230-1)

BEGIN TOSS UP QUESTIONS

- 13) Q: What type of animals are included in the order Perissodactyla?**
A: Hoofed, odd-toed non-ruminants
S: Griffiths (15)

14) Q: This condition occurs after death as a result of coagulation of cell proteins. What is this condition called?

A: Rigor mortis

S: Newhor (234)

TOSS UP WITH A BONUS ATTACHED

15) Q: Why does it take longer for a horse to cool off in hot, humid weather?

A: Hot, humid conditions inhibit evaporation

S: AYHC 1st (860-1)

BONUS QUESTION

16) Q: Name 3 light breeds of horse that originated in Germany.

A: Trakehner, Hanoverian, Holstein, Westphalian, Oldenburg

S: Griffiths (129, 141, 194, 273, 290)

17) Q: What are the name of the muscles that cause the hair to stand on end and increase the insulating effect?

A: Erectores pilorum

S: Griffiths (99)

18) Q: What are the 2 classes of vitamins?

A: Fat and water soluble

S: Griffiths (122)

19) Q: Define "nephritis."

A: Inflammation of the kidneys

S: Newhor (189)

TOSS UP WITH A BONUS ATTACHED

20) Q: The clinical signs of what disease include strange behavior, lameness, neurological deficits, self-mutilation, fear, aggressiveness, and depression?

A: Rabies

S: AYHC 1st (445-3)

BONUS QUESTION

21) Q: What are 2 symptoms that a horse may show if it has dental problems?

A: Bit chewing, tongue lolling, abnormal head carriage, head tossing, refusal to accept bit pressure, stiffness

S: Lewis 2nd (175)

22) Q: It is estimated that 25% of Arabians carry the gene for which hereditary disease?

A: Combined Immune Deficiency (CID)

S: AYHC 1st (1060-4)

23) Q: This term is defined as keeping biological or living things, both plants and animals, from being infected with agents that can cause health and disease issues.

A: Biosecurity

S: Griffiths (193)

24) Q: What is meconium?

A: Dark green, brown to black, tarry stools formed prior to birth

S: Lewis 2nd (252)

TOSS UP WITH A BONUS ATTACHED

25) Q: How long does it take for food to pass through the small intestine?

A: Approximately 30 to 90 Minutes

S: AYHC-YL (203-1)

BONUS QUESTION

- 26) Q: Name 3 things that affect the semen production of a stallion.**
A: 1) Time or season of year; 2) frequency of ejaculation; 3) age;
4) testicular size; 5) sexual stimulation; 6) exogenous steroids
S: Evans 2nd (368)
- 27) Q: What vitamins are synthesized in the gastrointestinal tract?**
A: B-complex vitamins and vitamin K
S: Lewis 2nd (52)
- 28) Q: What current breed of horse was known as Steeldusts in the early 1900s?**
A: Quarter Horses
S: Evans 2nd (25)
- 29) Q: What horse is known for the "slow gait?"**
A: American Saddlebred or five gaited horses
S: Griffiths (81)
- 30) Q: What is a chukka?**
A: A seven-and-one-half minute period in a polo game
S: Griffiths (56)
- 31) Q: The common zebra, known as Grant's Zebra, has how many diploid chromosomes?**
A: 44
S: Griffiths (16)
- 32) Q: When should a mare be bred to ensure the greatest possible chance of conception?**
A: 1-2 days prior to ovulation
S: AYHC 1st (930-1)

END OF ROUND 4

2016 District Horse Bowl Contest Senior Division Round Five

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: Stronglyes are also known by what name?**
A: Bloodworms
S: AYHC 1st (430-5)
- C2 2) Q: The American Association of Equine Practitioners recommends that broodmares be vaccinated against EHV-1 during which months of pregnancy?**
A: Fifth, seventh, and ninth
S: AYHC 1st (930-5)
- C3 3) Q: What is unique about the homozygous genetic dominant code "WW" (capital W, capital W)?**
A: The homozygous dominant gene WW is lethal
S: Evans 2nd (511)
- C4 4) Q: Though fresh green leaves of this tree are not poisonous, dried leaves and the bark can cause acute hemolytic anemia and if several pounds are consumed death can occur within 1-5 days. Name the tree described.**
A: Red maple
S: Lewis 2nd (331)
- C1 5) Q: What part of the mare's reproductive tract acts as a physical barrier between the vagina and the uterus?**
A: Cervix
S: HIH (910-1)

- C2 6) Q: There are no specific treatments for some poisonings, but horses are usually given activated charcoal and a saline laxative by stomach tube. What is the reason for giving these medications?**
A: To prevent further absorption of the toxin in the gastrointestinal tract, the activated charcoal binds with the toxin and the saline laxative speeds passage of any toxins through the digestive tract
S: Lewis 2nd (339)
- C3 7) Q: What is the science that deals with drugs, their sources, their appearance, chemistry, actions, and their uses called?**
A: Pharmacology
S: Newhor (210)
- C4 8) Q: How long after ovulation is an egg viable?**
A: 12-24 hours
S: Evans 2nd (396)
- C1 9) Q: Agalactia is when the mare is unable to produce milk. Give a nutritional reason for why this condition may occur.**
A: Grazing on fescue pasture during pregnancy; inadequate energy or protein intake for a sufficient period of time; body condition score less than 4
S: Lewis 2nd (234)
- C2 10) Q: What is the crude protein content of alfalfa hay?**
A: 10 to 12%
S: AYHC 1st (820-2)
- C3 11) Q: Up to how much weight can a Standardbred lose in a 1 mile race?**
A: 12 to 33 pounds
S: Lewis 2nd (200)

- C4 12) Q: What feed additive is commonly used to increase feed efficiency and weight gain in cattle but is highly toxic to horses?**
A: Rumensin
S: Newhor (237)

BEGIN TOSS UP QUESTIONS

- 13) Q: The ovary is responsible for the production of what two female hormones?**
A: Estrogen and progesterone
S: AYHC 1st (910-4)
- 14) Q: What type of Equine Encephalomyelitis has the lowest mortality rate?**
A: Western
S: AYHC 1st (625-3)

TOSS UP WITH A BONUS ATTACHED

- 15) Q: The bacterium known as *Fusobacterium necrophorum* is usually present in hoof tissue affected by what condition?**
A: Thrush
S: Kainer (24)

BONUS QUESTION

- 16) Q: Name 3 bones comprising the pelvic girdle.**
A: 1) Ilium; 2) pubis; 3) ischium; 4) sacrum; 5) caudal vertebrae
S: Kainer (28)
- 17) Q: What is the function of the corpus luteum?**
A: Maintains pregnancy via the production of progesterone
S: AYHC 1st (910-7)

18) Q: What is another term for the sinoatrial node in the wall of the right atrium?

A: Pacemaker

S: Kainer (58)

19) Q: What is myelitis?

A: Inflammation of the spinal cord

S: Newhor (184)

TOSS UP WITH A BONUS ATTACHED

20) Q: One of the first requirements for registration in the United States Trotting Association is the ability to trot or pace a mile in what amount of time?

A: 2 minutes 30 seconds

S: AYHC 1st (160-1)

BONUS QUESTION

21) Q: Normal equine urine ranges in color from pale to reddish yellow. Abnormal coloring can indicate a vast array of health problems. Explain what the following 3 colors of urine could indicate: Red, Brownish-green and dark brown/coffee-colored.

A: 1) Red: bleeding in the urinary tract; 2) brownish-green: jaundice and liver problems; 3) dark brown/coffee colored: azoturia

S: AYHC 1st (425-2)

22) Q: When using the system for scoring behavioral estrus in mares, what behavior is seen in a mare scoring a 1?

A: Mare is not aggressive towards the stallion, but looks away or is uninterested

S: AYHC 1st (930-2)

23) Q: This term describes a stumbling or staggering gait due to brain or spinal cord disorders.

A: Ataxia

S: Newhor (17)

24) Q: What are the 3 components of the nervous system?

A: Brain, spinal cord, nerves

S: Griffiths (212)

TOSS UP WITH A BONUS ATTACHED

25) Q: On which set of legs would you find the metatarsal joint?

A: Hind

S: Lewis 2nd (395)

BONUS QUESTION

26) Q: Give 3 advantages of composted manure over raw manure.

A: 1) Composting produces a relatively dry end product that is easily handled (less volume and weight); 2) composting can kill fly eggs and larvae, pathogens and weed seeds; 3) compost has less of an odor; 4) composted manure acts a slow release fertilizer and soil conditioner

S: AYHC 1st (365-2)

27) Q: The interosseous ligament connects the splint bone to what?

A: Cannon bone

S: Newhor (154)

28) Q: Mycotoxins are toxic substances produced by what?

A: Molds or fungi

S: Lewis2 (346)

29) Q: What is the primary function of the scrotum?

A: Maintaining proper temperature for sperm production

S: AYHC-YL (I227-2L)

- 30) Q: Name the equine disease that is characterized by a respiratory illness, limb swelling or stocking up, and abortion in mares.**
A: Equine Viral Arteritis (EVA)
S: AYHC 1st (620-1)
- 31) Q: What are the minute vessels that connect arterioles and venules?**
A: Capillaries
S: Newhor (47)
- 32) Q: What is the only draft breed believed to have had an infusion of Arab and Barb ancestry?**
A: Percheron
S: Evans 2nd (69)

END OF ROUND 5

2016 State Horse Bowl Contest Senior Division Round Six

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: When does peak lactation occur in the mare?**
A: 8 to 12 weeks after parturition
S: Evans 2nd (296)
- C2 2) Q: What does the flagging of the stallion's tail during breeding indicate?**
A: The stallion has ejaculated
S: Evans 2nd (378)
- C3 3) Q: What is the name of the stallion that was foaled in 1895 in Illinois and who became the most important of all sires in the development of the Quarter Horse breed?**
A: Peter McCue
S: Evans 2nd (25)
- C4 4) Q: Where was the Conestoga horse bred?**
A: Southern Pennsylvania
S: Evans 2nd (9)
- C1 5) Q: What is the type of gene action that causes the phenotype of the heterozygote to be intermediate between those of either homozygote?**
A: Codominance
S: Evans 2nd (459)
- C2 6) Q: In the stallion, what cells secrete estrogen?**
A: Leydig cells
S: AYHC 1st (980-2)

C3 7) Q: What plant contains an anti-thiamine compound and may induce a thiamin deficiency in horses?

A: Bracken fern

S: Evans 2nd (242)

C4 8) Q: What is the term for abnormal increase in the number of normal cells in a tissue?

A: Hyperplasia

S: Newhor (146)

C1 9) Q: What is the function of the digital extensor tendon?

A: It acts to help move the hoof forward and lift the toe

S: Newhor (81)

C2 10) Q: How much does a normal placenta weigh in terms of the foal's birth weight?

A: 10 to 11% of the foal's birth weight

S: AYHC 1st (970-5)

C3 11) Q: What causes neonatal isoerythrolysis?

A: Incompatibility of blood types between a mare and her foal

S: Newhor (189)

C4 12) Q: What are the 2 most common causes of tachycardia in the horse?

A: Exercise and excitement

S: Evans 2nd (596)

BEGIN TOSS UP QUESTIONS

13) Q: What are 2 symptoms of a zinc deficiency in the horse?

A: Poor growth and skin lesions (parakeratosis)

S: Evans 2nd (234)

14) Q: What are osteoblasts responsible for?

A: Forming bone

S: Evans 2nd (237)

TOSS UP WITH A BONUS ATTACHED

15) Q: The proper ratio of calcium to phosphorous in the diet is 1:1-6:1. Why is it important that the ratio is not inverted such that phosphorus is higher than calcium?

A: Calcium absorption may be impaired and skeletal abnormalities may occur

S: AYHC 1st (750-2)

BONUS QUESTION

16) Q: Describe 3 characteristics of healthy equine urine.

A: 1) Somewhat thick and syrupy; 2) cloudy; 3) colored yellow to orange

S: Kainer (68)

17) Q: Administration of what medication at 2 to 3 times the normal dose is effective for the treatment and prevention of tapeworms?

A: Pyrantel pamoate

S: Lewis 2nd (159)

18) Q: What is the technical name for the enlarged follicle that bulges from the ovary just prior to ovulation?

A: Graafian follicle

S: AYHC 1st (920-4)

19) Q: A large infestation of bots can cause paralysis of what anatomical structure?

A: Esophagus

S: AYHC 1st (415-5)

TOSS UP WITH A BONUS ATTACHED

- 20) **Q: What bacteria is responsible for poll evil and fistula of the withers?**
A: *Brucellosis*
S: Newhor (41)

BONUS QUESTION

- 21) **Q: Name 4 different vaccinations that your horse should be current on prior to traveling?**
A: 1) Eastern/Western encephalomyelitis; 2) tetanus; 3) influenza; 4) rhinopneumonitis; 5) Potomac horse fever; 6) rabies; 7) West Nile virus
S: AYHC 1st (1150-1)
- 22) **Q: If a horse vaccinated for rabies is exposed to a confirmed rabid animal, what procedure should the owner follow?**
A: Re-vaccinate horses immediately and observe for 45 days
S: AYHC 1st (445-4)
- 23) **Q: What condition, also called jaundice, is caused by excess bile pigments in the blood or in the skin and its membrane, giving it a yellow color?**
A: Icterus
S: Lewis 2nd (393)
- 24) **Q: Ultrasonography can detect twinning in utero as early as how many days after conception?**
A: 12 to 14
S: Lewis 2nd (240)

TOSS UP WITH A BONUS ATTACHED

- 25) **Q: Name one disease caused by infection from rickettsia.**
A: Equine ehrlichiosis or Potomac horse fever
S: Griffiths (175)

BONUS QUESTION

- 26) Q: The epididymus is divided into 3 segments. What are the scientific names of these segments?**
A: Caput, corpus, and cauda
S: AYHC (980-3)
- 27) Q: Myopathy refers to disease in what part of the horse's body?**
A: Muscle
S: Newhor (186)
- 28) Q: What is the full name, not the abbreviation, of the hormone the hormone that is responsible for the release of luteinizing hormone and follicle stimulating hormone from the pituitary gland?**
A: Gonadotropin releasing hormone
S: Evans 2nd (337)
- 29) Q: Who was the first racehorse to win \$2 million?**
A: Affirmed
S: Newhor (4)
- 30) Q: 2 part question: what is the common name for equine spinal ataxia, and what age group does it normally affect?**
A: Wobbles; usually affects foals
S: Evans 2nd (516)
- 31) Q: What is another name for alpha tocopherol?**
A: Vitamin E
S: Newhor (7)
- 32) Q: What is the name for a two wheeled carriage where the coachman's seat is behind the passengers seat and is usually drawn by one horse?**
A: Hanson cab
S: Newhor (130)

END OF ROUND 6

2016 State Horse Bowl Contest Senior Division Round Seven

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: How long does it take for the fertilized ovum to migrate from the oviduct to the mare's uterus?**
A: Approximately 6 days (5 to 8 days)
S: Evans 2nd (340)
- C2 2) Q: What is the function of the panniculus muscle?**
A: To shake off flies that land on the skin
S: Newhor (203)
- C3 3) Q: The small intestine takes up about what percentage of the gastrointestinal tract?**
A: 30%
S: Griffiths (111)
- C4 4) Q: 2 part question: what type of muscle does equine exertional myopathy affect and when does it usually occur?**
A: It affects the skeletal muscles and the heart muscle and it usually occurs shortly after beginning exercise
S: Lewis 2nd (211)
- C1 5) Q: Energy not needed by the body at the time of digestion is stored as what?**
A: Glycogen
S: Griffiths (146)

- C2 6) Q: A sufficient excess of dietary calcium results in excess secretion of what thyroid hormone?**
A: Calcitonin
S: Lewis 2nd (24)
- C3 7) Q: What 2 types of vaccines are available to treat tetanus?**
A: Antitoxin and toxoid
S: Griffiths (172)
- C4 8) Q: Your horse is exhibiting a Vitamin A deficiency marked by abnormal hoof growth and development. What can you feed your horse to correct this deficiency?**
A: Green roughage
S: AYHC 1st (505-2)
- C1 9) Q: What is entropion?**
A: Inversion or turning inward of the eyelid
S: Newhor (97)
- C2 10) Q: What type of cellular division occurs in the cells of the body?**
A: Mitosis
S: Griffiths (88)
- C3 11) Q: If a mare does not become pregnant, what specific hormone is released from the uterus 14 to 16 days following ovulation? This hormone travels to the ovary where it causes destruction of the corpus luteum.**
A: Prostaglandin F_{2α}
S: AYHC 1st (920-6)
- C4 12) Q: In what county did the Halflinger originate?**
A: Austria
S: Evans 2nd (74)

BEGIN TOSS UP QUESTIONS

13) Q: What commonly fed herb has anti-bacterial, anti-viral, anti-fungal and anti-parasitic benefits?

A: Garlic

S: AYHC 1st (742-3)

14) Q: Blood is supplied to the lungs by what artery?

A: Pulmonary artery

S: Griffiths (208)

TOSS UP WITH A BONUS ATTACHED

15) Q: What are the wing like structures attached to the sides, or wings, of the coffin bone?

A: Lateral cartilages

S: AYHC 1st (505-4)

BONUS QUESTION

16) Q: List 5 symptoms of equine Cushing's disease.

A: 1) Abnormal hair coat; 2) lack of ability to shed hair; 3) frequent urination; 4) ravenous appetite; 5) obesity; 6) excessive drinking of water; 7) muscle weakness; 8) depressed attitude; 9) bulging pad of fat above the eyes; 10) lowered immune system making them susceptible to secondary infections

S: Griffiths (181)

17) Q: What is atresia coli?

A: Closure of the colon or a severed large intestine

S: Newhor (17)

18) Q: Which mineral is important for enzyme function and bone growth?

A: Magnesium

S: Griffiths (134)

19) Q: Though it is inexpensive, why is urea not a good source of nitrogen for horses?

A: The horse's digestive system does not contain a rumen which is need to breakdown and utilize urea

S: Griffiths (119)

TOSS UP WITH A BONUS ATTACHED

20) Q: Large numbers of this parasite can interfere with the function of the ileocecal valve, which is the junction of the small and large intestine.

A: Tapeworm

S: AYHC 1st (430-4)

BONUS QUESTION

21) Q: Name, in order, the 3 growth stages of grass hay.

A: 1) Pre-bloom; 2) flowering (boot); 3) mature

S: LEWIS2 69

22) Q: Threonine, methionine and histidine are all classified as what?

A: Essential amino acids

S: Evans 2nd (263)

23) Q: Wood chewing is an example of a behavior that is contagious or infectious in horses. What is the scientific name for this type of behavior?

A: Allelomimetic

S: Evans 2nd (676)

24) Q: What does yellow marrow produce?

A: Fat cells

S: Kainer (63)

TOSS UP WITH A BONUS ATTACHED

25) Q: The bark and leaves of a choke cherry tree contain what poison that results in difficulty breathing and can result in death?

A: Cyanide

S: Newhor (56)

BONUS QUESTION

26) Q: What are the names of the hormones commonly known as T3 and T4?

A: T3: triiodothyronine; T4: thyroxine

S: EqSci (138)

27) Q: Name the outermost surface of the equine ovary.

A: Medulla

S: AYHC 1st (920-4)

28) Q: Name a type of test used to verify parentage.

A: Blood-group tests, lymphocyte tests, DNA tests

S: Griffiths (102-103)

29) Q: The foal's digestive tract permits absorption of the colostrum antibodies for how many hours after birth?

A: 36

S: Evans 2nd (427)

30) Q: What is leukopenia?

A: Abnormally low level of white blood cells

S: Newhor (168)

31) Q: Name a feedstuff high in vitamin E.

A: 1) Green, growing forage; 2) good- quality hay; 3) cereal grains; 4) wheat germ oil

S: Evans 2nd (219)

32) Q: Name the genetic disease that is a fatal disorder of Belgian horses and related European breeds that results in the birth of foals with skin and mouth lesions that are present or develop within the first few days of life.

A: JEB (Junctional Epydermolysis Bulosa)

S: AYHC 1st (1095-2)

END OF ROUND 7

2016 State Horse Bowl Contest Senior Division Round Eight

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: What type of colic is caused by abnormal accumulations of gas in the intestines?**
A: Distension or gas colic
S: Kainer (55)
- C2 2) Q: 20% of the iron in the body is located where?**
A: Contained in myoglobin
S: Griffiths (139)
- C3 3) Q: The foxglove plant can be toxic to the horse when consumed in the field, but it can also be used to derive a medication called Digitalis. Digitalis would be used to treat disorders of what specific organ in the body?**
A: Heart
S: Newhor (81)
- C4 4) Q: An exhausted, overtaxed horse may lose control over diaphragm contraction and suffer from what debilitating condition?**
A: Thumps or synchronous diaphragmatic flutter
S: Evans 2nd (110)
- C1 5) Q: In the Midwest during the early 19th century, what plant caused severe muscle tremors and death when ingested by horses, cows and sheep?**
A: White snakeroot (*Eupatorium urticaefolium*)
S: Lewis 2nd (300)

- C2 6) Q: What volume of blood is ejected from the heart with each contraction?**
A: Approximately 1 liter
S: Evans 2nd (111)
- C3 7) Q: Fat, which is the second most important energy source fed to horses, is a more concentrated energy source than carbohydrates and proteins. Fat supplies how much more energy per gram than the other two nutrients?**
A: 2.25 times more energy
S: Griffiths (147)
- C4 8) Q: 2 part question: what mineral does vitamin E partner with and for what purpose does this occur?**
A: Selenium; to prevent cell damage due to oxidation
S: Griffiths (140)
- C1 9) Q: What is exotosis?**
A: Abnormal growth of the periosteum
S: Evans 2nd (90)
- C2 10) Q: What is the primary nerve of the front limbs?**
A: Brachial plexus
S: Griffiths (212)
- C3 11) Q: What is the term for a dun horse with a black dorsal stripe?**
A: Coyote or bayo coyote
S: Newhor (25)
- C4 12) Q: What enzyme is secreted by the pancreas into the small intestine and enhances protein digestion?**
A: Trypsin
S: Lewis 2nd (407)

BEGIN TOSS UP QUESTIONS

13) Q: Name the supplement that may assist older horses in the digestion of fiber in the lower gastrointestinal tract and has also been shown to enhance phosphorus absorption.

A: Cultured yeast

S: AYHC 1st (450-2)

14) Q: In traits affected by qualitative gene action, what is one of the primary types of gene action that can influence the trait?

A: 1) Dominance; 2) codominance; 3) partial dominance

S: AYHC 1st (1020-2)

TOSS UP WITH A BONUS ATTACHED

15) Q: How long does diestrus last?

A: 14-16 days

S: AYHC 1st (920-5)

BONUS QUESTION

16) Q: 2 part question: differentiate between the terms valgus and varus and give an example of each as it relates to the horse's conformation.

A: Valgus means a deviation toward the midline (such as knock-kneed).
Varus mean a deviation of a joint away from the midline (such as bowlegged).

S: Lewis 2nd (408)

17) Q: A hound that bays and flings his tongue around when not on the line is called what?

A: A babbler

S: Newhor (20)

18) Q: Name the 6 joints in the front leg.

A: 1) Shoulder, 2) elbow, 3) knee, 4) fetlock, 5) pastern, 6) coffin

S: Evans 2nd (98)

19) Q: What is a "stone boat?"

A: The stone weight that is pulled in draft pulling competitions

S: Newhor (257)

TOSS UP WITH A BONUS ATTACHED

20) Q: Which famous American Saddlebred was the 6 time winner of the \$10,000 five-gaited championship at the Kentucky State Fair?

A: Wing Commander

S: Evans 2nd (39)

BONUS QUESTION

21) Q: What is the respiration, pulse, and temperature of a horse experiencing heat exhaustion?

A: 1) Respiration: more than 30 breaths per minute; 2) pulse: 50-100 beats per minute; 3) temperature: 105-109 degrees Fahrenheit

S: AYHC 1st (410-1)

22) Q: Where does the influenza virus multiply in the horse?

A: In the epithelial cells of the horse's upper respiratory tract

S: AYHC 1st (605-1)

23) Q: Define the term "idiopathic."

A: Arising from an unknown cause

S: Newhor (149)

24) Q: What is one method for testing immunoglobulin concentration in colostrum?

A: Colostrometer and agglutination test

S: Evans 2nd (427)

TOSS UP WITH A BONUS ATTACHED

25) Q: What is the degeneration of the specific cells in the cerebellum which results in incoordination?

A: Cerebellar ataxia

S: AYHC 1st (1060-5)

BONUS QUESTION

26) Q: In what 3 locations is glycogen stored?

A: 1) Kidneys; 2) liver; 3) muscles

S: Griffiths (146)

27) Q: What are the 3 placental membranes?

A: 1) Amnion; 2) allantois; 3) chorion

S: Evans 2nd (340)

28) Q: Vitamin D also known as the "sunshine vitamin" is needed in the horses' diet for what reason?

A: Mineral utilization and bone formation; it is involved in the absorption and use of calcium and phosphorous

S: Griffiths (123)

29) Q: What bile pigment is formed by the breakdown of red blood cells?

A: Bilirubin

S: Newhor (28)

30) Q: What vitamins may be toxic if given in high quantities?

A: A, D, and K

S: Evans 2nd (273)

31) Q: 2 part question: what is the corpus luteum and what does it do?

A: A solid mass that forms from the follicle in the ovary after ovulation; it produces the hormone progesterone that helps maintain pregnancy

S: IDET (69)

32) Q: What term refers to an inflammation of the duodenum?

A: Duodentitis

S: Newhor (86)

END OF ROUND 8

2016 State Horse Bowl Contest Senior Division Round Nine

BEGIN ONE-ON-ONE QUESTIONS

- C1 1) Q: How much blood, in gallons, does a mature, 1,000 pound horse have?**
A: 13.2 gallons
S: AYHC 1st (830-1)
- C2 2) Q: In reference to horse racing, what does black type indicate?**
A: The horse has won or placed in a stakes race
S: Newhor (29)
- C3 3) Q: Fetal movements can often be observed in the mare's flank after what month of gestation?**
A: The 7th month
S: Evans 2nd (349)
- C4 4) Q: Melatonin inhibits what hormone?**
A: GnRH (gonadatropin releasing hormone)
S: AYHC 1st (920-8)
- C1 5) Q: Name 2 characteristics that the primary layer of a bandage should have.**
A: 1) Should not adhere to the wound; 2) should maintain good contact; 3) should permit absorption of exudate (serum); 4) should be non-irritating
S: AYHC 1st (1160-1)

- C2 6) Q: Rations providing over 100% of the National Research Council's recommended amounts of energy for rapidly growing foals may result in an increased incidence of what condition?**
A: Developmental Orthopedic Disease
S: AYHC 1st (783-1)
- C3 7) Q: The granules of pigment that control color in the horse are called melanin. Name the two forms of melanin?**
A: Eumelanin and pheomelanin
S: Griffiths (93)
- C4 8) Q: What is aspermia?**
A: Failure of formation or emission of sperm
S: Newhor (16)
- C1 9) Q: Describe Care, Custody, and Control insurance.**
A: This coverage is designed to protect a stable against claims involving non-owned horses that are injured or die from the stable's negligence while in the stable's care, custody, and control
S: AYHC 1st (1340-2)
- C2 10) Q: This parasite, often related to exposure to donkeys, affects the horse's bronchial tubes, lungs, and digestive tract.**
A: Lungworms
S: Griffiths (189)
- C3 11) Q: What is another name for vitamin B2?**
A: Riboflavin
S: Griffiths (127)
- C4 12) Q: What is the cause of shaker foal syndrome?**
A: Botulism infection of the intestines
S: Newhor (242)

BEGIN TOSS UP QUESTIONS

13) Q: Why aren't vitamin C deficiencies observed in horses?

A: The liver produces vitamin C

S: AYHC 1st (730-1)

14) Q: What is the importance of the endosteum?

A: Bone is laid down by this membrane

S: Kainer (9)

TOSS UP WITH A BONUS ATTACHED

15) Q: What is xylazine? (zy-la-zine)

A: A sedative or tranquilizer used commonly in horses; other name is rompun

S: Newhor (298)

BONUS QUESTION

16) Q: Name and explain what the 3 root words mean that form the word Encephalomyelitis.

A: 1) Encephalo: brain; 2) myel: spinal cord; 3) itis: inflammation

S: Lewis 2nd (388)

17) Q: What are the two major proteins of blood plasma?

A: Albumin and globulin

S: Lewis 2nd (380)

18) Q: Give the name of the B vitamin that is required for the body to produce epinephrine and norepinephrine.

A: Pyroxidine

S: Griffiths (127)

19) Q: Name a member of the order perissodactyla that is not the horse, ass, or zebra.

A: Tapir or rhinoceros

S: Griffiths (15)

TOSS UP WITH A BONUS ATTACHED

- 20) Q: Depending on the amount of depletion, how long does it take for glycogen stores to be replenished in the muscle following intense exercise?**
- A:** 1-5 days
- S:** AYHC 1st (851-6)

BONUS QUESTION

- 21) Q: 2 part question: what are the purpose of the coriums in the hoof and name 3 of the 5 coriums.**
- A:** 1) They are modified vascular tissue that furnishes nutrition to the hoof;
2) perioplic corium, coronary corium, laminar corium, sole corium, frog corium
- S:** Evans 2nd (696)
- 22) Q: What is adenocarcinoma?**
- A:** Cancer of glandular tissues
- S:** Newhor (3)
- 23) Q: Dilution of coat colors is an example of what type of gene action?**
- A:** Partial dominance
- S:** AYHC 1st (1020-3)
- 24) Q: Name one of the three types of tests developed for the diagnosis of Equine Protozoal Myeloencephalitis.**
- A:** Western blot, polymerase chain reaction, indirect immunofluoresence antibody
- S:** AYHC 1st (670-2)

TOSS UP WITH A BONUS ATTACHED

- 25) Q: What is peritonitis?**
- A:** An inflammation of the lining of the abdomen
- S:** Newhor (209)

BONUS QUESTION

- 26) **Q: Name the entire zoological classification of the horse.**
A: Animalia, chordata, mammalia, perissodactyla, equidae, equus, *Equus caballus*
S: Griffiths (15)
- 27) **Q: What is intestinal stenosis?**
A: The narrowing of a section of intestine, usually due to scar tissue
S: Newhor (154)
- 28) **Q: In what disease would a horse display the posture called "elephant-on-a-ball?"**
A: Botulism
S: AYHC 1st (445-8)
- 29) **Q: A defect in the diaphragm that allows organs of the abdominal cavity to enter the thoracic cavity is known as what?**
A: Diaphragmatic hernia
S: Newhor (80)
- 30) **Q: Name one drug that is commonly used in anticoagulation therapy.**
A: Heparin or aspirin
S: AYHC 1st (640-1)
- 31) **Q: What is a polygenic trait?**
A: A genetic trait that is controlled by multiple genes, gene pairs, and/or alleles
S: Griffiths (91)
- 32) **Q: If given to a mare after detection of a large, pre-ovulatory follicle, what substance usually causes ovulation within 48 hours after administration?**
A: Human chorionic gonadotropin or deslorelin
S: AYHC 1st (940-4)

END OF ROUND 9

2016 State Horse Bowl Contest
Senior Division Extra Toss Up Questions

- 1) Q: Which gait is commonly referred to as the plantation gait?**
A: Running walk
Source: Evans 2nd (178)

- 2) Q: What current breed was formerly known as the "Palouse horse?"**
A: Appaloosa
Source: AYHC 1st (152B-1)

- 3) Q: The withers, back, coupling, and croup are collectively referred to by what conformation term?**
A: Topline
Source: AYHC-YL (323-2L)

- 4) Q: Which nerve is responsible for motor control of the eyelid, ear, and facial muscles?**
A: Facial nerve
Source: Kainer (78)

- 5) Q: What is the scientific name for the stable fly?**
A: Stomoxys calcitrans
Source: AYHC 1st (415-1)

- 6) Q: What is micturition?**
A: Urination
Source: Evans 2nd (119)

- 7) **Q: What is the common term for the deformity of the jaw referred to as prognathia?**
A: Monkey mouth or sow mouth
Source: Lewis 2nd (396)
- 8) **Q: What noseband is a cross between a cavesson and a figure eight noseband?**
A: Flash noseband
Source: Newhor (109)
- 9) **Q: Identify the two most palatable grasses for horse pastures.**
A: Kentucky bluegrass and timothy
Source: Lewis 2nd (109)
- 10) **Q: The cells known as the Islets of Langerhans are found in what organ?**
A: Pancreas
Source: Kainer (54)
- 11) **Q: What is the minimum recommended size of a box stall?**
A: 10 x 10 feet
Source: AYHC-YL (320-3)
- 12) **Q: At what age, in months, should a vaccination program begin?**
A: 3 months
Source: Evans 2nd (564)
- 13) **Q: Name the 3 types of muscle.**
A: Skeletal, smooth, cardiac
Source: Evans 2nd (99)

- 14) **Q: How many bones make up the horse's skull?**
A: 34
Source: Kainer (6)
- 15) **Q: Why are white hooves typically not favored?**
A: They are thought to be softer and wear faster
Source: Griffiths (164)
- 16) **Q: What substance is considered to be the precursor to vitamin A production in the small intestine?**
A: Beta-carotene
Source: Griffiths (123)
- 17) **Q: How long is the incubation period for strangles, otherwise known as equine distemper?**
A: 3 to 6 days
Source: Newhor (48)
- 18) **Q: Define epilation.**
A: Removal of the hair by the roots
Source: Newhor (71)
- 19) **Q: What was the horse Dan Patch famous for?**
A: Pacing
Source: Evans 2nd (126)
- 20) **Q: What gene restricts color distribution to the points by means of a pair of alleles?**
A: Agouti gene
Source: Griffiths (95)

- 21) **Q: What is the term for the substance the horse's immune system will produce in response to the presence of an antigen?**
A: Antibody
Source: Newhor (12)
- 22) **Q: At what height of grass, in inches, is it recommended that horses be removed from a pasture to prevent overgrazing?**
A: 3 to 4 inches
Source: AYHC 1st (360-4)
- 23) **Q: In general, what determines the severity of a snaffle bit?**
A: Thickness of the mouthpiece
Source: AYHC 1st (1100-8)
- 24) **Q: What are the two species of lice that infest the horse?**
A: Biting and sucking
Source: Evans 2nd (642)
- 25) **Q: There are 3 different types of Western headstalls. Give the correct name for all 3 types.**
A: Split ear, slip ear, conventional
Source: AYHC 1st (1100-8)
- 26) **Q: What color is the result of a double dilution of bay?**
A: Perlino
Source: Evans 2nd (81)
- 27) **Q: What is the general name for a medication that is used to counteract a poison?**
A: Antidote
Source: Newhor (12)

- 28) **Q: What type of saddle has high thigh rolls and usually has no horn.**
A: Australian saddle
Source: AYHC 1st (1100-4)
- 29) **Q: Name 2 types of common pathogenic bacteria or protozoa that may be transmitted in horse manure.**
A: E. coli, Giardia, Salmonella
Source: AYHC 1st (365-5)
- 30) **Q: When the horse is undergoing strenuous exercise, what waste product produced by anaerobic glycolysis causes muscle fatigue?**
A: Lactic acid
Source: AYHC 1st (850-2)

Extra Bonus Questions

- 31) **Q: What are the four methods used to breed mares?**
A: 1) Pasture breeding; 2) hand breeding; 3) artificial insemination; 4) embryo transfer
Source: Lewis 2nd (237)
- 32) **Q: Identify 3 bacterial diseases that affect both humans and horses.**
A: 1) Tetanus; 2) botulism; 3) anthrax; 4) brucellosis; 5) Lyme disease
Source: Griffiths (170-171); Lewis 2nd (362)
- 33) **Q: What 4 purposes do saddle blankets serve?**
A: 1) To protect the horse's back; 2) to absorb sweat and moisture; 3) to protect the saddle; 4) to help the saddle fit better
Source:
- 34) **Q: What 4 organs or areas of the body do ascarids affect?**
A: 1) Udder and teats; 2) small intestine; 3) liver; 4) lungs
Source:

35) Q: Give 4 advantages to using a complete pelleted feed.

A: 1) Decreased feed waste; 2) easier to transport; 3) economy of space in storage;
4) reduced dust; 5) better feed efficiency; 6) beneficial for horses with poor teeth;
7) decreased colic in older horses; 8) contains all vitamins, minerals, and
supplements

Source: Evans 2nd (280); Lewis 2nd (94)