

2011
NC State Horse Bowl Contest
Mixed Division
Round One

Toss Up Questions

- 1) **Q- What is exostosis?**
A- An abnormal growth in the periosteum.
S- Evans2 (90)
- 2) **Q- What are the bones that function as levers and aid in support of weight & locomotion?**
A- Long bones
S- EVANS2 (90)
- 3) **Q- The horse is classified as a nonruminant herbivore. What does this mean?**
A- The horse is a roughage eater.
S-AYHC (B103-1L)
- 4) **Q- What is another name for the first upper premolar?**
A- The wolf tooth
S- CAHA (48)
- 5) **Q-Name the equine disease that is characterized by a respiratory illness, peripheral edema and abortion.**
A- Equine Viral Arteritis/ EVA
S-EVAN2 (598)
- 6) **Q- What is the term used to indicate a healthy, glossy hair coat?**
A-Bloom
S- LEWIS2 (382)
- 7) **Q-Give three (3) reasons why fats or oils may be added to the horse's diet.**
A- Decrease dust, lubricate and lessen wear on feed preparation and mixing equipment, as a binder for pelleting, to give a horse a glossier hair coat, to increase the energy density of the diet
S- Lewis2 (89)
- 8) **Q-What is a non-forage feed, high in fiber and low in digestible energy?**
A-Roughage
S- LEWIS2 (402)
- 9) **Q-Name one (1) plant that contains a neurotoxin.**
A- sagebrush, locoweed, milk vetch, yellow star thistle, Russian knapweed, horsetail, snake grass, bracken fern, sensitive fern, white snakeroot, crofton weed, jimmy weed, burrow weed, Johnson grass, Sudan grass
S-Lewis2 (315)
- 10) **Q- The short estrus period a mare undergoes shortly after foaling is called what?**
A- Foal Heat
S- HIH (940-5)
- 11) **Q- What is the outermost layer of the equine ovary?**
A- The medulla
S-HIH (910-4)

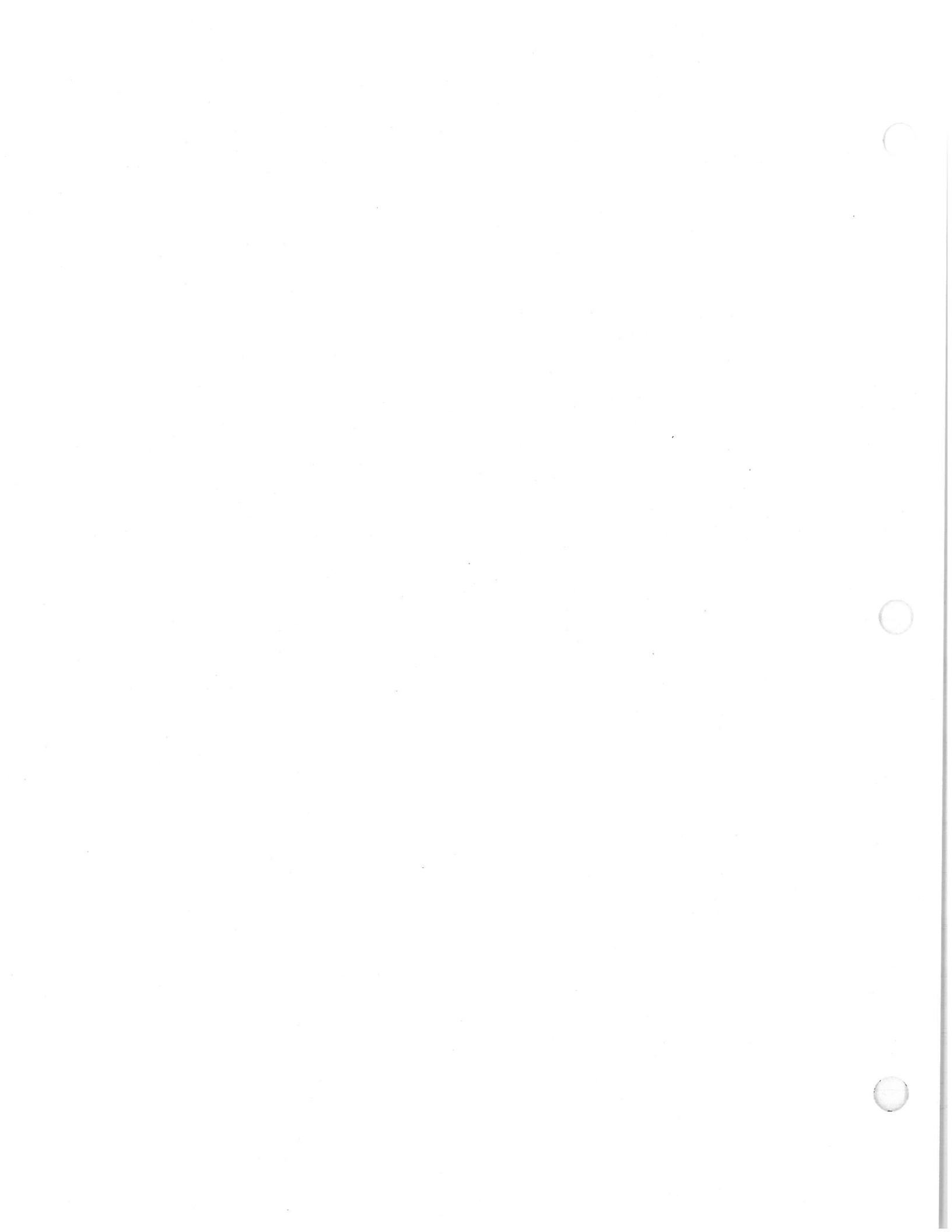
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- 12) **Q- Abortions attributable to equid herpesvirus 1 usually occur during which months of gestation?**
A- Months eight (8) to eleven (11)
S- HIH (610-1)
- 13) **Q- Name three (3) parts of the hoof.**
A- Toe, Quarter, Heel, Bar, Frog, and Sole
S- HIH (505-4)
- 14) **Q- Name two (2) essential functions of water in the body.**
A- Production of saliva, regulation of body temperature, chemical reactions involved in digestion, absorption and metabolism, normal cell function, lubrication of body parts and systems for normal function of joints, hearing CNS, sight, etc.
S-EqSci (116)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- What type of fly lay eggs on the hairs or horses, especially around the legs?
A- Stomach Bots
S- HIH (415-5)
- 16) **BONUS**
Q- During which epoch did the horse appear?
A-Eocene
S- EVANS2 (4)
- 17) **Q-Approximately how long are a mare's oviducts?**
A-Thirty (30) to seventy (70) mm
S- EVANS2 (319)
- 18) **Q- What is the feeding arrangement where a foal has access to a supplemental feed, but the mare does not?**
A-Creep feeder
S- EVANS2 (262)
- 19) **Q-Name the mineral that is an essential component of the hemoglobin in the horse's blood.**
A-Iron
S- EVANS2 (233)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- What gland is affected by a goiter?
A-thyroid gland
S-EVANS2 (233)
- 21) **BONUS**
Q-Nearly ninety percent (90%) of all Thoroughbreds trace back to what stallion that was unbeaten in twenty six (26) starts?
A-Eclipse
S-EVANS2 (21)

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- 22) **Q- What is the bucal cavity?**
A-The mouth
S- EVANS2 (194)
- 23) **Q-What results from ergot poisoning?**
A- Dry gangrene of the feet, ears and tail
S- IDET (99)
- 24) **Q- What is drenching?**
A-Giving liquid medication to a horse by pouring it down the throat from a bottle
S- IDET (84)
- 25) **Q- Crow hops are a term given what?**
A-Mild bucking motions
S- IDET (74)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- What does the term Brumby described?
A- Australian Wild Horses
S- IDET (41)
- 27) **BONUS**
Q- Who was the first racehorse to win two (\$2) million?
A- Affirmed
S- IDET (4)
- 28) **Q- What does a blue nose indicate?**
A-photosensitization
S- IDET (33)
- 29) **Q- The intraorbital artery feeds into the infraordital canal to supply blood to what structures?**
A-to the upper teeth
S- CAHA (61)
- 30) **Q- What condition is characterized by an inflammation of the airways and over distention and rupture of alveoli?**
A-Heaves
S-CAHA (67)
- 31) **Q- Horses with sickle hocks are predisposed to what problem?**
A- Curbs
S- AYHC (I229-2L)
- 32) **Q- Horses with what condition will, when moving, land on the toe to avoid concussion to the heel?**
A-Navicular
S-HIH 4(55-2)

END OF ROUND ONE



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Toss Up Questions

- 1) **Q- Kidney stones (renal calculi) are commonly observed in older horses who are fed what type of hay?**
A- Alfalfa
S-HIH (450-5)
- 2) **Q- Name one (1) type of vaccine for the Equid Herpesvirus.**
A- Pneumabort, Prestige, Rhinomune
S- HIH (615-1)
- 3) **Q- What does EVA refer to?**
A- Equine Viral Arteritis
S- HIH (620-1)
- 4) **Q- Horses with EIPH are often referred to as what?**
A- Bleeders
S- HIH (810-2)
- 5) **Q- During which months of pregnancy does a mare require the largest intake of protein and energy?**
A- Last three (3) months.
S- LEWIS2 (13)
- 6) **Q- Name two (2) trace minerals essential in the horses' diet.**
A- Selenium, iodine, copper, zinc, manganese, iron, or cobalt.
S- Lewis2 (19)
- 7) **Q- What is the ideal temperature of water that is consumed by the horse?**
A- Forty five (45) to sixty five (65) degrees
S- Lewis2 (189)
- 8) **Q- What can be done to prevent quarter cracks?**
A- Proper and regular hoof care
S- Lewis2 (290)
- 9) **Q- Is black walnut toxic to horses?**
A- Yes
S- Lewis2 (322)
- 10) **Q- What is failure of muscle coordination resulting in stumbling or weaving?**
A- Ataxia
S- LEWIS2 (381)
- 11) **Q- "Hay Belly" may be an indication of an excess of what in the horse's diet?**
A- Fiber
S- LEWIS2 (4)
- 12) **Q- What glandular organ located near the stomach serves as a reservoir for red blood cells and assists the body in combating infectious organisms?**
A- Spleen
S- LEWIS2 (404)

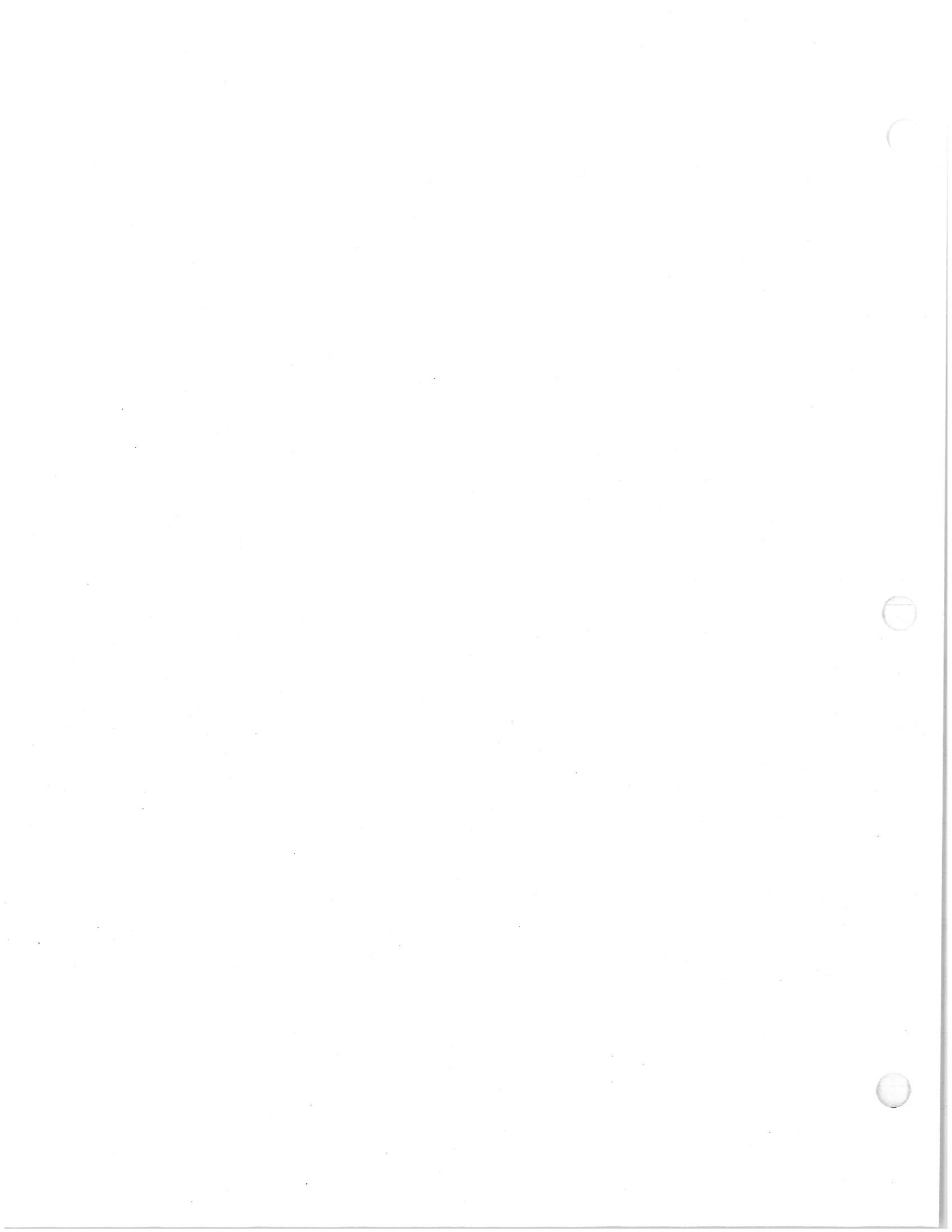
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- 13) **Q-What teeth do horses usually lose at two (2) years?**
A- Wolf
S- LEWIS2 (408)
- 14) **Q- What coat color pattern is associated with the lethal white foal syndrome?**
A-Overo
S- AYHC (1040-3)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q-Describe the "calico" hair coat color on horses.
A- Excessive white on legs and face, splashes and roaning on belly and body
S- AYHC (1040-3)
- 16) **BONUS**
Q- What is another name for hunt seat?
A- Forward seat
S- AYHC (1100-1)
- 17) **Q- What is the most severe bit used in western riding?**
A- Spade bit
S- AYHC (1100-10)
- 18) **Q- How long is a horn fly's life cycle?**
A- Ten (10) days
S- AYHC (415-2)
- 19) **Q-What would a brownish-green urine color indicate?**
A-Jaundice
S- AYHC (425-2)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- What type of internal parasite primarily affects foals and young horses?
A- Ascarids
S- AYHC (430-1)
- 21) **BONUS**
Q- In a normal birth, which direction should the foal's soles be presented?
A-Down towards the mare's hocks
S-AYHC (940-4)
- 22) **Q- In what part of the horse's digestive tract does maximum water absorption occur?**
A- Small Colon
S- AYHC (A303-3L)
- 23) **Q- Over sixty percent (60%) of Standardbred race horses are what color?**
A- Bay
S- AYHC (B110-2L)
- 24) **Q-What is an "inversion"?**
A- When the respiration rate of a horse is higher than the pulse rate
S-AYHC(B115-1L)

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- 25) **Q- In reference to feed processing, what is the term for grain that passes through rollers with corrugated surfaces?**
A- Crimping
S-AYHC (I202-2L)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- What bone is centered between the knee and fetlock?
A- Cannon Bone
S- AYHC (I229-1L)
- 27) **BONUS**
Q- Name a condition that is the result of a horse having short upright pasterns.
A- Ringbone and Navicular (also injuries of the fetlock joint)
S- CAHA (40)
- 28) **Q- What are the blood worms that infest horses?**
A- Strongyles
S- CAHA (60)
- 29) **Q- Complex compounds that contain nitrogen and are made up of amino acids are called what?**
A- Proteins
S- IDET (221)
- 30) **Q- Offspring of one or both parents are called what?**
A- Progeny
S-IDET (221)
- 31) **Q-Name three (3) bones of the horse's head.**
A-incisive, nasal, maxilla, orbital, mandible, occipital, frontal
S-IDET (248)
- 32) **Q- What is the substance found in foals lungs to allow the lungs to inflate adequately upon birth?**
A- Surfactant
S- IDET (260)

END OF ROUND TWO



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Round Three

Toss Up Questions

- 1) **Q-Name the light horse breed that originated in Tennessee.**
A- Tennessee Walking Horse
S- EVANS (240)
- 2) **Q- What provides the energy for muscle contractions?**
A- High-energy phosphate bonds in ATP.
S- EVANS2 (101)
- 3) **Q- The trachea divides into the left and right what?**
A- Bronchi
S- EVANS2 (105)
- 4) **Q- Movement of air into and out of the lungs is referred to as?**
A- Respiration
S- EVANS2 (108)
- 5) **Q-What is the pulse rate of a mature horse at rest.**
A-Thirty five (35) beats/minute
S- EVANS2 (111)
- 6) **Q- What are thick-walled muscular vessels that carry blood away from the heart?**
A- Arteries
S- EVANS2 (112)
- 7) **Q-What does the parathyroid control?**
A- Calcium/phosphorus ratio
S- EVANS2 (127)
- 8) **Q- The integumentary system of the horse refers to what body part?**
A- The skin
S- EVANS2 (128)
- 9) **Q- What causes the hair color?**
A- Melanin granules
S- EVANS2 (129)
- 10) **Q- A horse with a convex shaped nose is commonly referred to as what?**
A- Roman nose
S- EVANS2 (143)
- 11) **Q- What is the term for hock lameness without visible exostosis?**
A- Occult spavin or blind spavin
S- EVANS2 (166)
- 12) **Q- What year was the Arabian Horse Club Registry of America organized?**
A- 1908
S- EVANS2 (17)

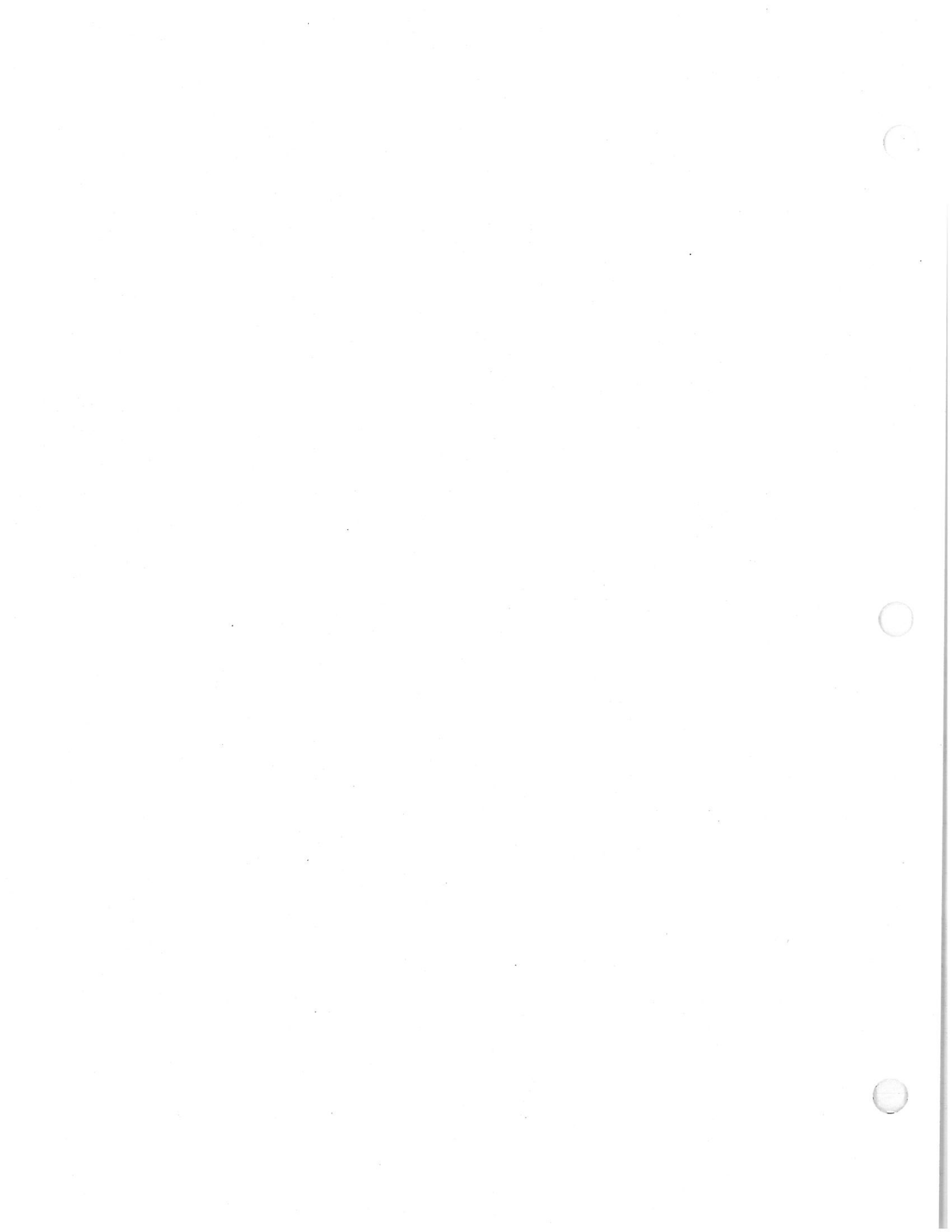
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- 13) **Q- What is a habit of force-swallowing gulps of air?**
A- Cribbing
S- EVANS2 (183)
- 14) **Q- How much saliva will a horse secrete in twenty four (24) hours?**
A- Ten (10) gallons or twelve (12) liters
S- EVANS2 (191)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q-What is the function of the panniculus muscle?
A- To shake off flies that land on the skin
S- EVANS2 (196)
- 16) **BONUS**
Q- What happens to beta-carotene not converted into vitamin A?
A-stored in fat deposits
S- EVANS2 (200)
- 17) **Q- What does the abbreviation "TDN" stand for?**
A- Total digestible nutrients.
S- EVANS2 (208)
- 18) **Q- What is the primary site of protein digestion?**
A- The small intestine
S- EVANS2 (196)
- 19) **Q-What is the proper name for nutrients sometimes referred to as "building blocks"?**
A-Amino acids
S- EVANS2 (219)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- What minerals are needed for the necessary formation of bone?
A- Calcium & Phosphorous
S-EVANS2 (221)
- 21) **BONUS**
Q- A deficiency of this trace mineral results in thin, weak bones.
A- Copper
S- EVANS2 (237)
- 22) **Q- What is happening when a horse has epistaxis?**
A- The horse is having a nose bleed
S- EVANS2 (244)
- 23) **Q- When muscle fibers are relaxed, do they lengthen or shorten?**
A- Lengthen (they shorten when the muscle contracts)
S- EVANS2 (99)
- 24) **Q- What is the test for EIA or Equine Infectious Anemia?**
A- Coggins Test
S- HIH (1060-5)

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- 25) **Q- What genetic condition causes a defect in the movement of potassium and sodium in and out of muscle and therefore causes horses to sometimes have muscle tremors and weakness?**
A- HYPP
S- HIH (1060-5)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- What is the only draft horse breed originated and recognized in the United States?
A- American Cream Draft Horse
S- HIH (163-1)
- 27) **BONUS**
Q- What is the amount of urine in quarts that is excused per day?
A- Approximately four (4) to seven (7) quarts.
S- HIH (425-2)
- 28) **Q- What immunization is especially important to a pregnant mare and should be given after the 5th, 7th & 9th month?**
A- Rhinopneumonitis
S- HIH (445-3)
- 29) **Q- What are the tiny, folded, accordion like, interlocking projections that connect the coffin bone to the hoof wall?**
A- The laminae
S- HIH (455-1)
- 30) **Q- What vitamin is necessary for the growth and development of normal hooves?**
A- Vitamin A, biotin
S- HIH (505-2)
- 31) **Q- What does a farrier put on horse shoes to help hold the shoe more securely to the horse's hoof?**
A- Clips
S- HIH (525-2)
- 32) **Q- Antimicrobial therapy should be reserved for horses that develop secondary bacterial infection of influenza, but if administered, the drugs should be continued for how many days?**
A- Ten (10) to fifteen (15) days
S- HIH (605-2)

END OF ROUND THREE



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Toss Up Questions

- 1) **Q- Examination of an animal's body after death is called what?**
A- Necropsy
S- IDET (189)
- 2) **Q- What is nettlerash?**
A- Hives
S- IDET (190)
- 3) **Q- What is the period of rapid follicle growth in the estrous cycle just prior to estrus?**
A- Proestrus
S- IDET (220)
- 4) **Q- Which English breed of horse most likely descended from the chargers used in the Middle Ages for jousts?**
A- Shire
S- IDET (243)
- 5) **Q- Name the five (5) regions of the spinal column.**
A- Cervical, thoracic, lumbar, sacral and coccygeal
S-IDET (251)
- 6) **Q- The bark and leaves of a Choke Cherry contain what poison that results in difficulty breathing and can result in death?**
A-Cyanide
S- IDET (56)
- 7) **Q- What is the female side of the pedigree referred to?**
A- Distaff side
S- IDET (82)
- 8) **Q- The primary function of the respiratory system is to do what?**
A- Oxygenate the blood
S- EVANS2 (104)
- 9) **Q- What is the cartilage trap that prevents food from entering the larynx when swallowing called?**
A- Epiglottis
S- EVANS2 (105)
- 10) **Q- How many lobes make up the horse's left lung?**
A- Two (2)
S- EVANS2 (105)
- 11) **Q-What results from hypertrophy to the abdominal muscles running parallel to the last rib, which contract to force air out of the lungs?**
A- Heave Line
S- EVANS2 (108)
- 12) **Q- What term is given to race horses who bleed from the lungs after strenuous exercise?**
A- Bleeders
S- EVANS2 (111)

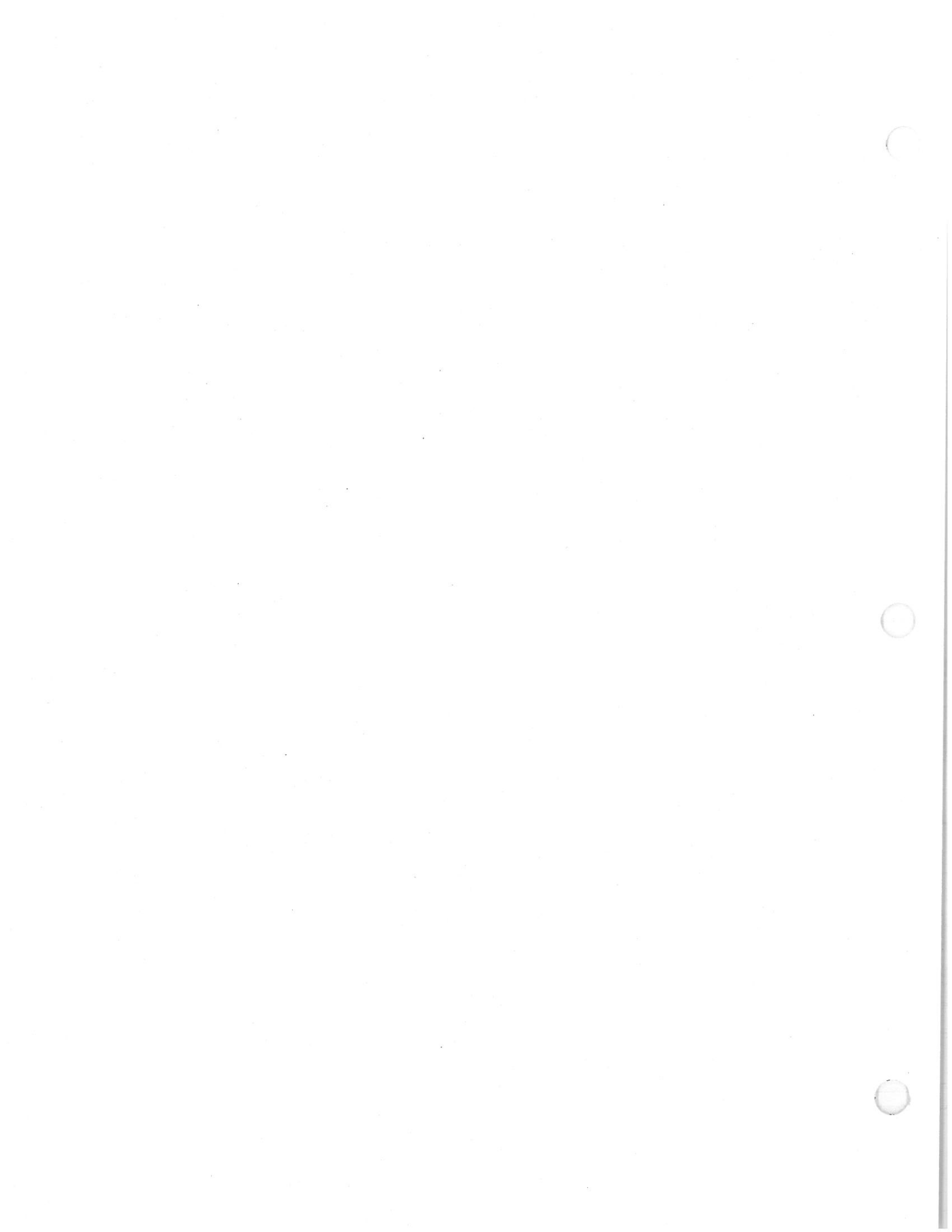
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- 13) **Q- Name three (3) blood vessels in the horse's body.**
A- Arteries, arterioles, capillaries, venules, veins
S- EVANS2 (113)
- 14) **Q- How long is the gastrointestinal tract that is a musculo-membranous tube that extends from the mouth to the anus?**
A- One hundred (100) ft
S-EVANS2 (118)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q-What is the terminal part of the digestive system that voids thirty to fifty (33-50) pounds of feces daily?
A-Anus
S-EVANS2 (119)
- 16) **BONUS**
Q- Name four (4) functions of the gastrointestinal tract.
A- Ingestion, mixing, absorption, grinding, digestion, and elimination
S- EVANS2 (119)
- 17) **Q- What are the two (2) types of vision utilized by the horse?**
A- Monocular, binocular
S- EVANS2 (124)
- 18) **Q- What organ is responsible for the production of estrogen and progesterone?**
A- Ovary
S- EVANS2 (127)
- 19) **Q- The basic metabolic rate is governed to a large extent by what product of the thyroid gland?**
A-Thyroxin
S- EVANS2 (127)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- What are the two (2) layers of skin called?
A-Dermis & epidermis
S- EVANS2 (128)
- 21) **BONUS**
Q- What is sebum and what is its function?
A- An oily, waxy secretion from the sebaceous glands on the skin, it coats the hair.
S- EVANS2 (129)
- 22) **Q-Name the zoological species of the horse.**
A-Equus Caballus
S- EVANS2 (13)
- 23) **Q- Explain the conformation term "walking downhill."**
A- A horse low at the withers and high at the hip
S- EVANS2 (135)

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- 24) **Q- What is a grade horse?**
A- One with unknown or mixed ancestry
S- EVANS2 (137)
- 25) **Q- A horse should be balanced and symmetrical. What three (3) measurements should be approximately the same?**
A- Height at withers, height at hip and length of body.
S- EVANS2 (133)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- What is the term defined as a concave neck accompanied by a depression in from the withers and often a thickened, rounded underline?
A- Ewe neck
S-EVANS2 (145)
- 27) **BONUS**
Q- Name of a bony growth usually occurring on the inside of the front legs.
A- Splint
S-EVANS2 (158)
- 28) **Q- What grain is most commonly overfed to horses?**
A- Corn
S- Lewis2 (71)
- 29) **Q- Excessive jerking of the hind legs characterizes what common unsoundness?**
A-Stringhalt
S- EVANS2 (164)
- 30) **Q- What is an infection that penetrates the white line of the sole and travels under the hoof wall between the sensitive and insensitive laminae until it abscesses at the coronet?**
A- Gravel
S-EVANS2 (167)
- 31) **Q- What is the term for hitting of the sole or shoe of the forefoot with the toe of the hind foot on the same side?**
A- Forging
S- EVANS2 (179)
- 32) **Q- What are the smallest blood vessels which connect arteries with veins?**
A-Capillaries
S- EVANS2 (194)

END OF ROUND FOUR



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Round Five

Toss Up Questions

- 1) **Q- What breed has provided foundation stock for so many of the light breeds of the United States?**
A- Thoroughbred
S- EVANS2 (20)
- 2) **Q- What is the name of the energy calculated by subtracting energy lost in feces from the gross energy in feed?**
A- Digestible energy
S-EVANS2 (208)
- 3) **Q- What is the most common form of malnutrition in horses in the United States?**
A-Obesity (overfeeding)
S- EVANS2 (218)
- 4) **Q- The addition of what amino acid into the diet will increase growth rate?**
A- Lysine
S- EVANS2 (219)
- 5) **Q- In what year did Secretariat win the Thoroughbred Triple Crown races?**
A- 1973
S-EVANS2 (22)
- 6) **Q-Where is approximately ninety nine percent (99%) of the total body calcium contained?**
A- The skeleton
S- EVANS2 (221)
- 7) **Q- Name one (1) function of calcium.**
A- Bone formation; muscle activity; blood clotting; enzyme activity
S- EVANS2 (221)
- 8) **Q-What is the cause of "big head" disease?**
A- Excess phosphorus and low calcium
S- EVANS2 (228)
- 9) **Q- Carotene is converted to what vitamin?**
A- Vitamin A
S- EVANS2 (238)
- 10) **Q- Until about 1938, horses of the quarter type were called what?**
A- Steeldusts
S- EVANS2 (25)
- 11) **Q- Which is higher in energy- barley, corn, or oats?**
A- Corn
S-EVANS2 (252)
- 12) **Q- When evaluating hay quality- does the younger plants in early bloom contain more or less digestible energy and nutrients per pound, than older plants in full bloom?**
A- The younger plants in early bloom contain more digestible nutrients.
S- EVANS2 (254)

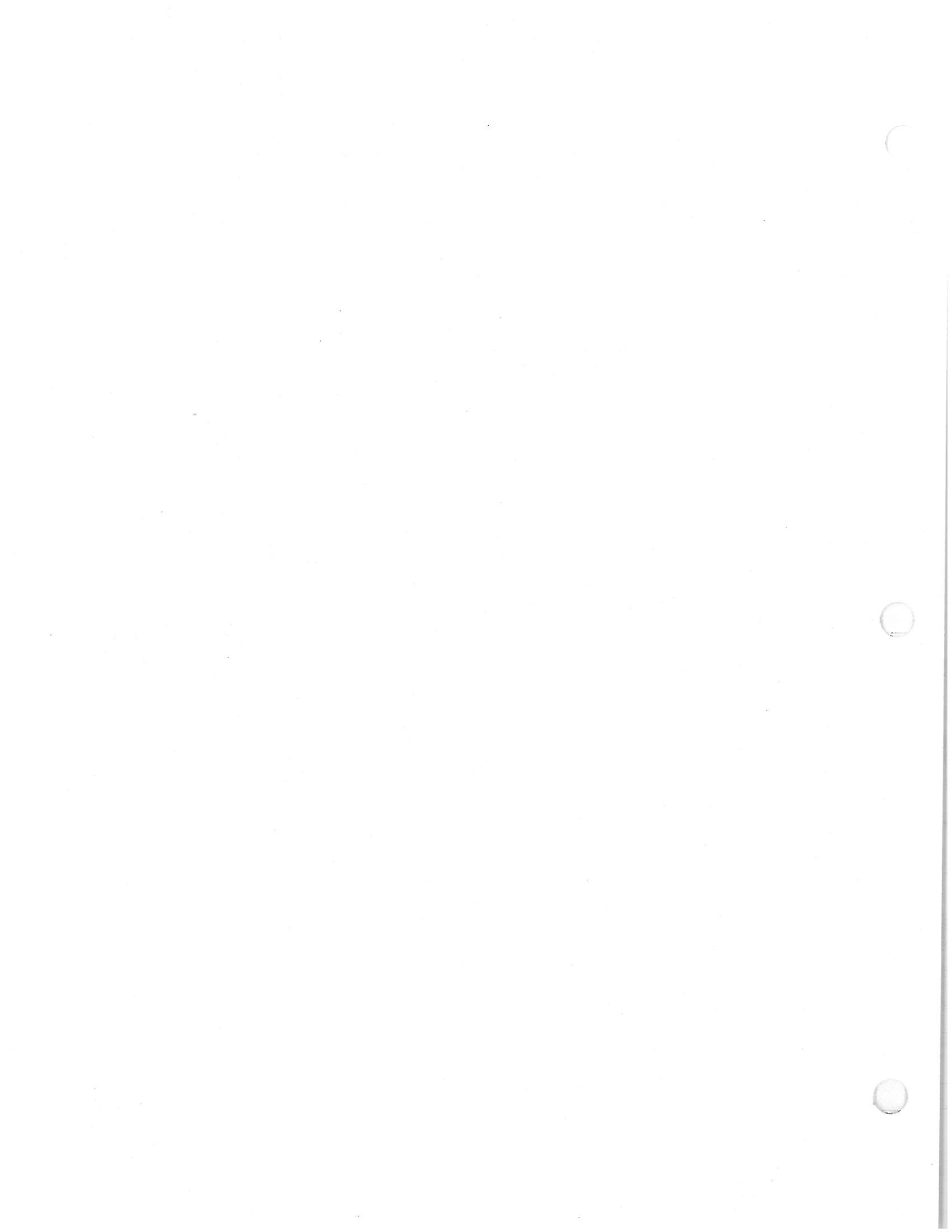
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- 13) **Q- Name two (2) kinds of grass or cereal hay.**
A- Bermuda grass, brome grass, orchard grass, prairie grass, reed canary grass, suda, barley, blue grass, fescue, oat hay, rye grass, timothy
S- EVANS2 (255)
- 14) **Q- What is the importance of Wimpy P-1 to the Quarter Horse breed?**
A- He was given the first permanent registration number
S- EVANS2 (26)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- Name one (1) class of horse that has a greater nutritional need.
A- Young foals, lactating mares and hard working horses
S-EVANS2 (262)
- 16) **BONUS**
Q- When does the fetus undergo its most rapid period of growth?
A- The last three to four (3-4) months of gestation
S- EVANS2 (271)
- 17) **Q- Name one (1) vitamin that can be toxic if given in large quantities.**
A- Vitamin A, D & K
S-EVANS2 (273)
- 18) **Q- Name two (2) major legumes.**
A- Alfalfa, Birdsfoot Trefoil, Red Clove, White Clover(abetra), Lespedeza, Soybeans
S- EVANS2 (275)
- 19) **Q- What is the recommended number of acres of pasture per horse?**
A-Two to three (2-3) acres
S- EVANS2 (276)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q-Name two (2) causes of underweight horses.
A- Parasites, lactating mare, lots of exercise and not enough feed, poor teeth, competition for food, malabsorption.
S- EVANS2 (295)
- 21) **BONUS**
Q- When does peak lactation occur after parturition?
A-Eight to twelve (8 – 12) weeks
S-EVANS2 (296)
- 22) **Q-How many laminae are there on each hoof?**
A-Six hundred (600)
S- EVANS2 (297)
- 23) **Q- What is geophagia?**
A- Eating of dirt
S- EVANS2 (303)

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- 24) **Q- Give three (3) common causes of colic in horses.**
A- Heavy parasite infestation, rapid change of feed, excessive amount of grain at one time, inadequate water supply, change in climate (temperature), sudden change in activity (stress)
S- EVANS2 (302,303)
- 25) **Q-What is enterotoxemia?**
A- Overeating
S- EVANS2 (305)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- Hyperlipemia is a condition where there is usually a high level of what?
A- Fat in the blood
S- EVANS2 (306)
- 27) **BONUS**
Q- What is the effect of eating wild cherry on horses?
A- Cyanide poisoning
S- EVANS2 (310)
- 28) **Q- The plant Equisetum has what effect on horses?**
A- Thiamin Deficiency
S- EVANS2 (310)
- 29) **Q- At what age does a mature ovary reach its maximum size?**
A- Three to four (3-4) years
S- EVANS2 (317)
- 30) **Q- Name one (1) distinctive characteristic required for registry in The Appaloosa Horse Registry.**
A- 1. One eye encircled with white, 2. the skin is mottled irregularly with black & white, particularly around the nostrils and genitalia, 3. hooves narrowly striped with vertically black & white
S- EVANS2 (32)
- 31) **Q- Name the horse breed, whose name was derived from the Palouse River.**
A- Appaloosa
S- EVANS2 (32)
- 32) **Q- The cervix protrudes into the vagina, forming a well-defined angle between the cervix and the vagina known as the what?**
A- Fornix
S- EVANS2 (321)

END OF ROUND FIVE



2011
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Round Six

Toss Up Questions

- 1) **Q- What is another name for the mare's mammary gland?**
A- Udder
S- EVANS2 (322)
- 2) **Q- Name the estrous cycle phase where the mare's attitude towards the stallion varies from non-interest to complete resistance.**
A- Diestrus
S- EVANS2 (323)
- 3) **Q- How long does it take for the fertilized ovum to migrate from the oviduct to the mare's uterus?**
A- Approximately six (6) days
S- EVANS2 (340)
- 4) **Q- On average, how many days longer are colts carried than fillies during gestation?**
A- Two to seven (2-7) days
S- EVANS2 (343)
- 5) **Q- Name the part of the reproductive tract of the male that suspends the testes outside the stallion's body.**
A- Scrotum
S-EVANS2 (355)
- 6) **Q- What is orbital cellulitis?**
A- An inflammation of the tissues surrounding the eyeball.
S- EVANS2 (356)
- 7) **Q- What anatomical part of the stallion is being described: a double invagination of skin contains and covers the free or prescrotum portion of the penis when not erect.**
A-The sheath or prepuce.
S- EVANS2 (359)
- 8) **Q- What solid coat color is unacceptable for registration in the American Morgan Horse Association?**
A- White
S- EVANS2 (36)
- 9) **Q- What is the function of the vesicular glands?**
A- To secrete the "gel fraction" of semen
S- EVANS2 (360)
- 10) **Q-How long is the spermatogenic cycle, in days?**
A- Forty nine (49) days
S- EVANS2 (363)
- 11) **Q-At about what age does a stallion reach puberty?**
A- One (1) Year (11.5 TO 14.5 Months)
S- EVANS2 (361)

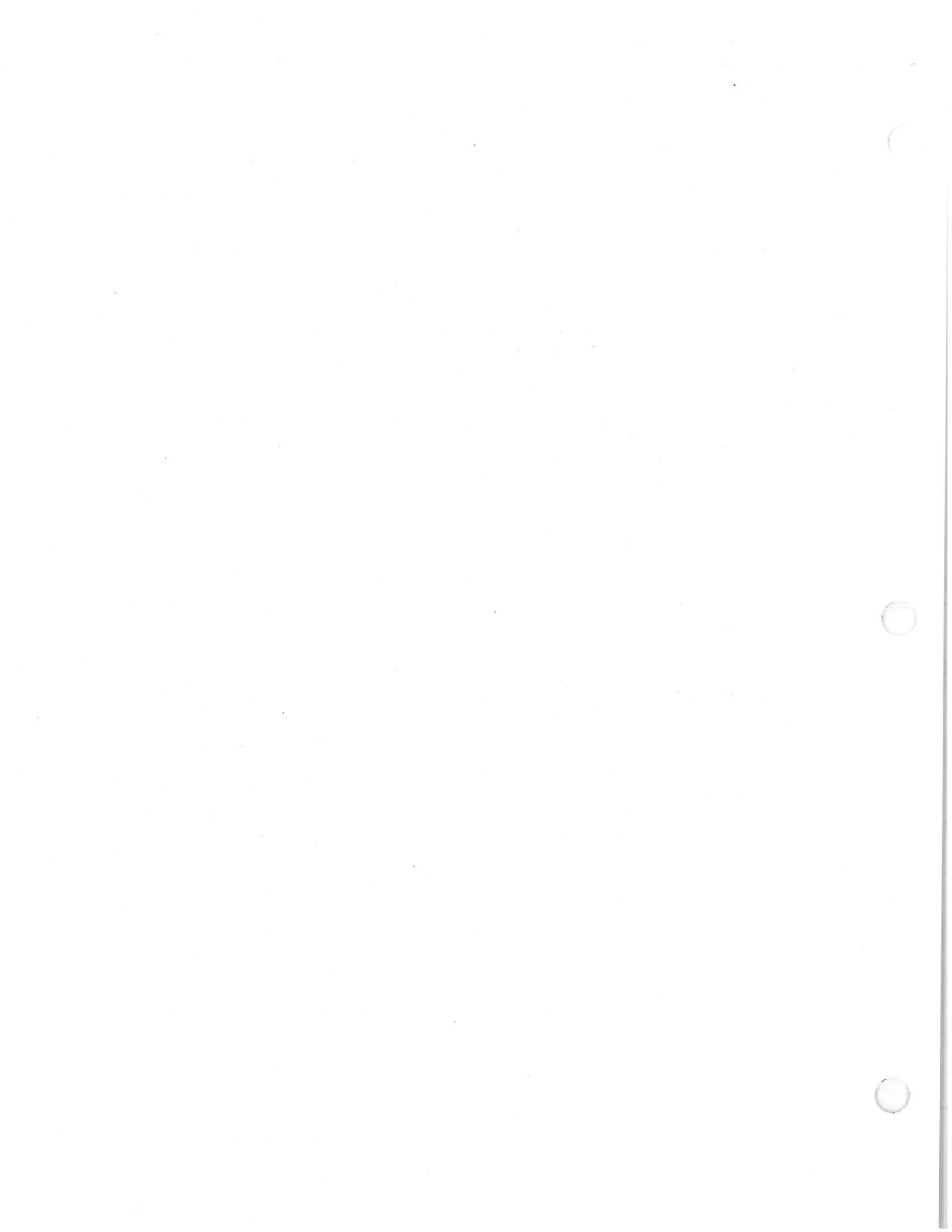
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- 12) **Q- What are the three (3) basic models of artificial vaginas?**
A- Colorado, Missouri and Fujihara
S- EVANS2 (376)
- 13) **Q- Name the foundation sire of the American Saddlebred.**
A- Denmark
S- EVANS2 (38)
- 14) **Q-At what age are horses usually castrated?**
A- between birth and two (2) years of age
S- EVANS2 (384)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- What is another term for a ridgeling?
A- cryptorchid
S- EVANS2 (387)
- 16) **BONUS**
Q- On what two (2) continents are fossil remains of Equus NOT found?
A- Australia and Antarctica
S- EVANS2 (4)
- 17) **Q- Name the breed that naturally overstrides.**
A- Tennessee Walking Horse
S- EVANS2 (40)
- 18) **Q- Where did the fox trotting horse originate?**
A- The Ozark Mountains
S- EVANS2 (41)
- 19) **Q- What makes vomiting very rare in the horse?**
A-the strength of the caudal esophageal sphincter muscle
S- CAHA (51)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- A maiden mare can be protected from over penetration with the use of what?
A- Breeding roll
S-EVANS2 (410)
- 21) **BONUS**
Q- What is an embryo?
A- Fertilized egg
S- EVANS2 (411)
- 22) **Q- What are the two (2) general types of dystocia?**
A- Fetal and maternal
S- EVANS2 (423)
- 23) **Q- For how long does a mare produce colostrum?**
A- A maximum of forty eight (48) hours.
S-EVANS2 (427)

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- 24) **Q- Entropin is a condition of some newborn foals and is usually observed one to two (1-2) days after birth. What is entropion and how is it detected?**
A- The eyelids and lashes are turned inward, causing the foal's eyes to water.
S- EVANS2 (428)
- 25) **Q- Where did the Paso Fino originate?**
A- Puerto Rico and Colombia
S- EVANS2 (43)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- What is the term for the six-foot length of rope used in calf roping to tie the calf's legs?
A- Piggin String
S- EVANS2 (438)
- 27) **BONUS**
Q- How many chromosomes does the Przewalski's Horse have?
A- Sixty six (66)
S- EVANS2 (449)
- 28) **Q- What term describes the physical position of a gene on a chromosome?**
A- Locus
S- EVANS2 (451)
- 29) **Q- What does the term phenotype mean?**
A- Outward appearances, what an animal looks like
S-EVANS2 (458)
- 30) **Q- Name a breed whose name comes from a Spanish word which means paint, painted or spotted.**
A- Pinto horse
S-EVANS2 (46)
- 31) **Q- What color is the only dilution of black without black points?**
A-Perlino
S- EVANS2 (473)
- 32) **Q-What type of genes are responsible for the size and distribution of the spots on a leopard appaloosa?**
A- Modifier genes
S- EVANS2 (497)

END OF ROUND SIX



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Round Seven

Toss Up Questions

- 1) **Q-What is the term for destruction of red blood cells of the foal by serum antibodies found in the colostrum of the mare?**
A- Neonatal isoerythrolysis, hemolytic icterus, hemolytic disease
S- EVANS2 (509)
- 2) **Q- What does "gruella" mean in Spanish?**
A- Blue crane
S- EVANS2 (51)
- 3) **Q- A tumor of pigment-forming cells commonly seen in older gray horses is known as what?**
A- Melanoma
S- EVANS2 (514)
- 4) **Q-What is another name for the disease Water Head?**
A- Hydrocephalus
S- EVANS2 (517)
- 5) **Q- What part of the brain controls coordination of movement?**
A- Cerebellum
S- EVANS2 (517)
- 6) **Q- What is an atresia coli?**
A- Failure to develop a portion of the colon
S- EVANS2 (517)
- 7) **Q- Why are stiff forelegs lethal to foals?**
A- Because the foal is unable to stand and nurse
S- EVANS2 (518)
- 8) **Q- What is the tarpan?**
A- A wild horse of central Europe
S- EVANS2 (52)
- 9) **Q-The failure of one (1) or both testes to descend completely into the scrotum is called what?**
A- Cryptorchidism
S- EVANS2 (520)
- 10) **Q- In which breed of horses is night blindness most common?**
A- Appaloosas
S- EVANS2 (521)
- 11) **Q- What is linebreeding?**
A- A form of inbreeding aimed at trying to maintain a close relationship to a particular animal
S- EVANS2 (539)
- 12) **Q- Name the two (2) breeds of horse developed by American Indians.**
A- Chickasaw and Appaloosa
S- EVANS2 (55)

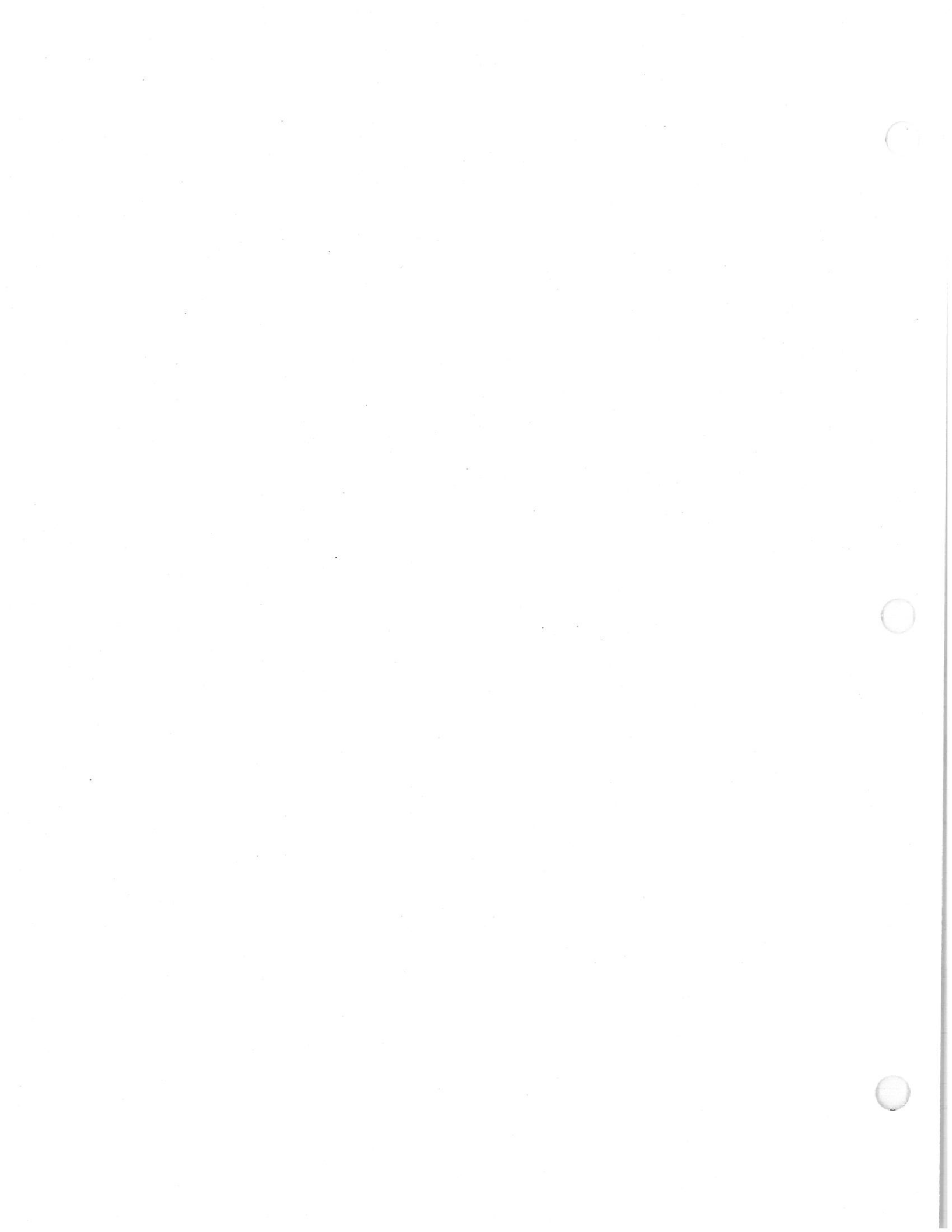
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- 13) **Q- What is bradycardia?**
A-Slower than normal heartbeat
S- EVANS2 (556)
- 14) **Q-What is the common name for Laryngeal Hemophlegia?**
A- Roaring
S- EVANS2 (568)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- What organic acid is produced by anaerobic muscle metabolism?
A- Lactic acid
S- IDET (163)
- 16) **BONUS**
Q- What is the function of the broad ligament?
A- Suspend the uterus within the body cavity
S- AYHC (910-3)
- 17) **Q-What is the incubation period of the West Nile Virus?**
A- Five to fifteen (5-15) days
S- HIH (665-1)
- 18) **Q- Name the procedure where horsemen visually observe and/or feel the fat cover on the horse's body.**
A- Condition scoring
S- HIH (710-4)
- 19) **Q- What is the name for fermented forage plants?**
A-Silage
S- LEWIS2 (403)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- What type of embryonic tissue to melanocytes develop from?
A- neural crest
S-EqSci (96)
- 21) **BONUS**
Q-What are the two (2) primary expenses for horse owners?
A- Feed and Board
S- HIH (210-3)
- 22) **Q- What man was the founding force behind the American Crème Horse Association of America?**
A- C.T. Rierson
S- HIH (163-1)
- 23) **Q- The breakdown of what allows muscles to have energy to contract?**
A- ATP
S-HIH (840-2)
- 24) **Q-The ovarian end of the oviduct is known as the what?**
A- infundibulum
S- HIH (910-3)

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Round Seven

- 25) **Q- Give the common name for the tarsal joint.**
A- Hock
S- LEWIS2 (393)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- What is the term used to describe a portion of an organ or tissue which protrudes through an abnormal opening?
A- Hernia
S- LEWIS2 (393)
- 27) **BONUS**
Q- What duct carries sperm to the ejaculatory duct?
A- vas deferens
S- HIH (920-4)
- 28) **Q- At what age does a mare's reproductive ability decrease?**
A- After age sixteen (16)
S-HIH (940-1)
- 29) **Q- What part of the horse's foot provides traction and absorbs shock?**
A- Frog
S- AYHC (525-1)
- 30) **Q- Which organ in the digestive system is responsible for the horses gut sounds?**
A- Cecum
S-AYHC (710-2)
- 31) **Q- How many grams of calcium should a weanling of four (4) months have daily?**
A- Three to four (3-4) grams
S-AYHC (790-2)
- 32) **Q-At what age does the Galvayne's groove first appear?**
A- Ten (10) years
S- CAHA (49)

END OF ROUND SEVEN



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Round Eight

Toss Up Questions

- 1) **Q- The intraorbital artery feeds into the infraorbital canal to supply blood to what structures?**
A- to the upper teeth
S-CAHA (61)
- 2) **Q- What two (2) breeds were crossed to form the Welera?**
A- Arabian and Welsh
S-IDET (10)
- 3) **Q- What is the distance in miles of an eight (8) furlong race?**
A- One (1) mile
S- IDET (116)
- 4) **Q- Name the artery that carries oxygen poor blood from the heart to the lungs.**
A- Pulmonary artery
S- EVANS2 (111)
- 5) **Q- What is the common name for leg edema?**
A-Stocked up
S- EVANS2 (113)
- 6) **Q- Describe the condition called gonitis.**
A- An inflammation of the stifle joint which may be acute or chronic.
S- EVANS2 (164)
- 7) **Q-How long, on average, does asphalt paint last on fencing?**
A- Eight (8) years
S-HIH (350-2)
- 8) **Q- What is the primary cause of runoff on horse farms?**
A- Overgrazing
S-HIH (360-4)
- 9) **Q- What is the most persistent pest to horses?**
A- Flies
S- HIH (415-1)
- 10) **Q- A sudden, involuntary, contraction of muscle is called what?**
A- Spasm
S- LEWIS2 (404)
- 11) **Q- Genetically, what are the three (3) most common colors of horses?**
A- Bay, black and chestnut
S- AYHC (1040-1)
- 12) **Q- What is the main function of a headstall?**
A- To hold the bit evenly and comfortably in the horse's mouth.
S- AYHC (1100-6)

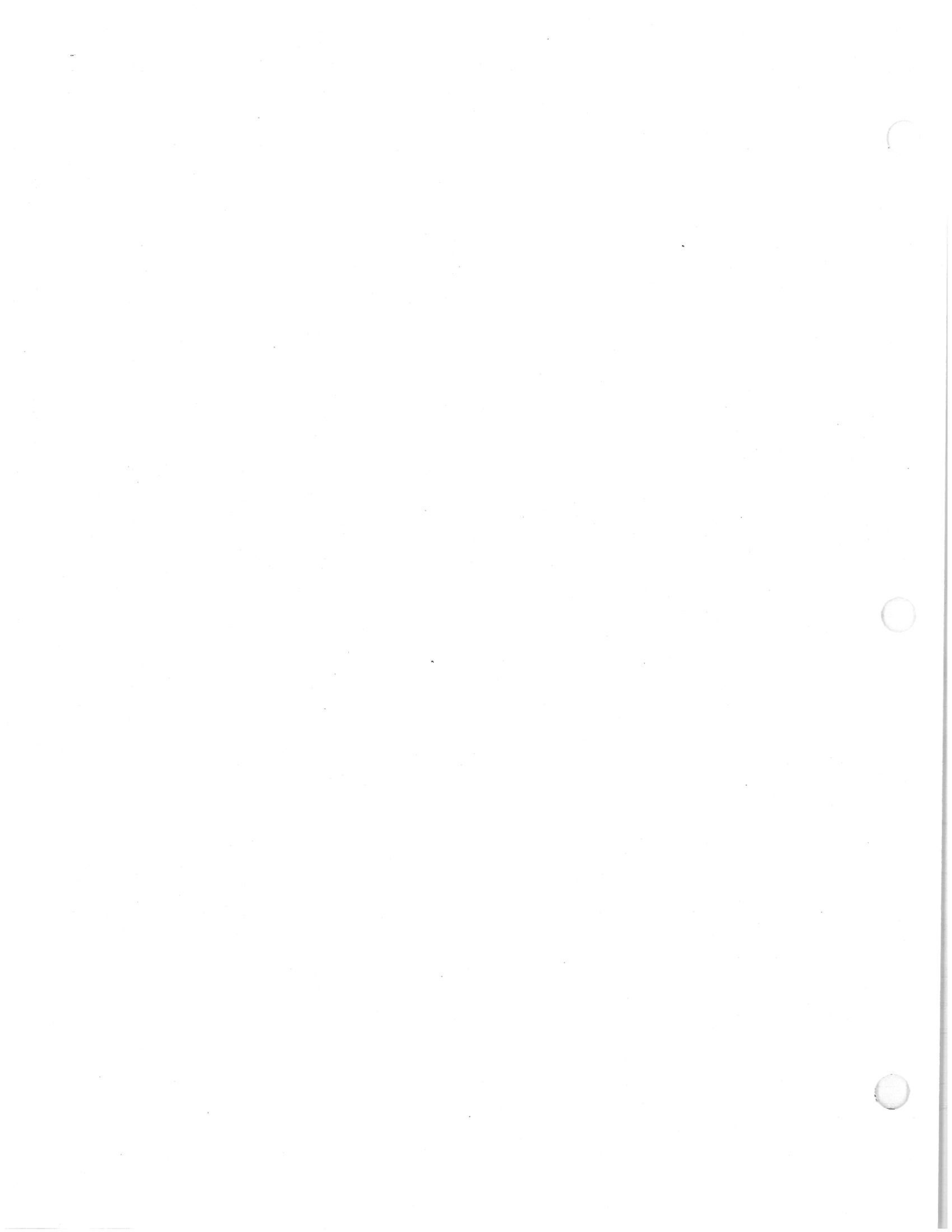
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Round Eight

- 13) **Q-How many inches taller should the trailer be than the horse's normal resting head position?**
A-Ten inches (10)
S- AYHC (1155-2)
- 14) **Q- What breed has vertically striped hooves?**
A- Appaloosa
S- AYHC (158-1)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- Where do you find tactile hairs protruding from on your horse's body?
A- around the eyelids, nostrils and lips
S- CAHA (4)
- 16) **BONUS**
Q- The lower teeth are attached to what bone?
A- The mandible
S- CAHA (41)
- 17) **Q- What ligament connects the splint bone to the cannon bone?**
A- The interosseous ligament
S- IDET (154)
- 18) **Q- To be free from living germs of disease defines what term?**
A- Aseptic
S- IDET (16)
- 19) **Q- What is known as the volume of air inspired or expired during each breathing cycle, and is approximately six (6) liters?**
A-tidal volume
S- EVANS2 (109)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q-The fluid content of what area of the horse serves as a major fluid reservoir to replace plasma fluid loss during exercise?
A- Gastrointestinal tract
S-EVANS2 (118)
- 21) **BONUS**
Q- The horse's forelimbs bear about what percent of its weight?
A- Sixty five percent (65%)
S- HIH (230-1)
- 22) **Q- What are three (3) ways to control flies besides fly spray?**
A- Fans, sticky fly traps, screening
S- HIH (415-3)
- 23) **Q- Name two (2) signs of protein deficiency in a horse's diet.**
A- Weight loss, reduced performance ability, slowed hair growth, shedding, a coarse, unkempt appearance, slow hoof growth, hoof splitting, hoof cracking.
S- LEWIS2 (14)

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Round Eight

- 24) **Q- What are the reservoirs for encephalitis?**
A- Wild animals and birds.
S- LEWIS2 (169)
- 25) **Q-Name two (2) fat soluble vitamins.**
A- A, D, E, and K
S-LEWIS2 (18)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q-What percentage of energy used by the horse is given off as heat?
A-Seventy five to eighty percent (75-80%)
S- LEWIS2 (199)
- 27) **BONUS**
Q- Since gray color has a dominant gene, each gray horse has at least one (1) parent of what color?
A- Gray
S- AYHC (1040-3)
- 28) **Q- It is estimated that twenty five percent (25%) of Arabians carry the gene for which hereditary disease?**
A- Combined Immune Deficiency (CID)
S- AYHC (1060-4)
- 29) **Q- Of what material are "never-rust" bits and hardware made of?**
A- Solid nickel
S- AYHC (1100-10)
- 30) **Q- What soft horn is between the hoof and the coronet band?**
A- Periople
S-CAHA (24)
- 31) **Q- The iliopsoas, tensor of the fascia lata, sartorial, pectineal and straight femoral muscles act to flex which joint?**
A- The hip joint
S- CAHA (34)
- 32) **Q- What is the primary way that parasites are spread?**
A- Through manure
S- HIH (430-4)

END OF ROUND EIGHT



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Round Nine

Toss Up Questions

- 1) **Q- What is the term for the degree of expression of a trait for which an animal has the gene?**
A- Penetrance
S- AYHC (1060-2)
- 2) **Q- What is the English version of the western breast collar?**
A- Breastplate
S- AYHC (1100-12)
- 3) **Q- The back of a western saddle is referred to as what?**
A- Cantle
S- AYHC (1100-4)
- 4) **Q- What word indicates a location toward the free end of a limb that is further from the body?**
A- Distal
S- CAHA (2)
- 5) **Q- What is a chronic infection of the frog which produces foul smelling dead tissue?**
A- Thrush
S- CAHA (24)
- 6) **Q- Inflammation and thickening of the long plantar ligament caused by faulty conformation or by repeated blows is called what?**
A- Curb
S- CAHA (32)
- 7) **Q- Smegma is produced by what glands?**
A- sebaceous glands
S- CAHA (5)
- 8) **Q- What is an abortifacient?**
A- A substance that causes abortion
S- IDET (1)
- 9) **Q- What is the science of the structure of the animal body and the relation of all its parts?**
A- Anatomy
S- IDET (10)
- 10) **Q- Give the term for a horse that throws its front feet violently forward at the trot, with little flexion.**
A- Bean shooter
S- IDET (25)
- 11) **Q- What is the name of a rubber or leather ring that lies between the horse's cheek and the bit ring or shank to prevent skin pinching?**
A- Bit Guard
S- IDET (29)

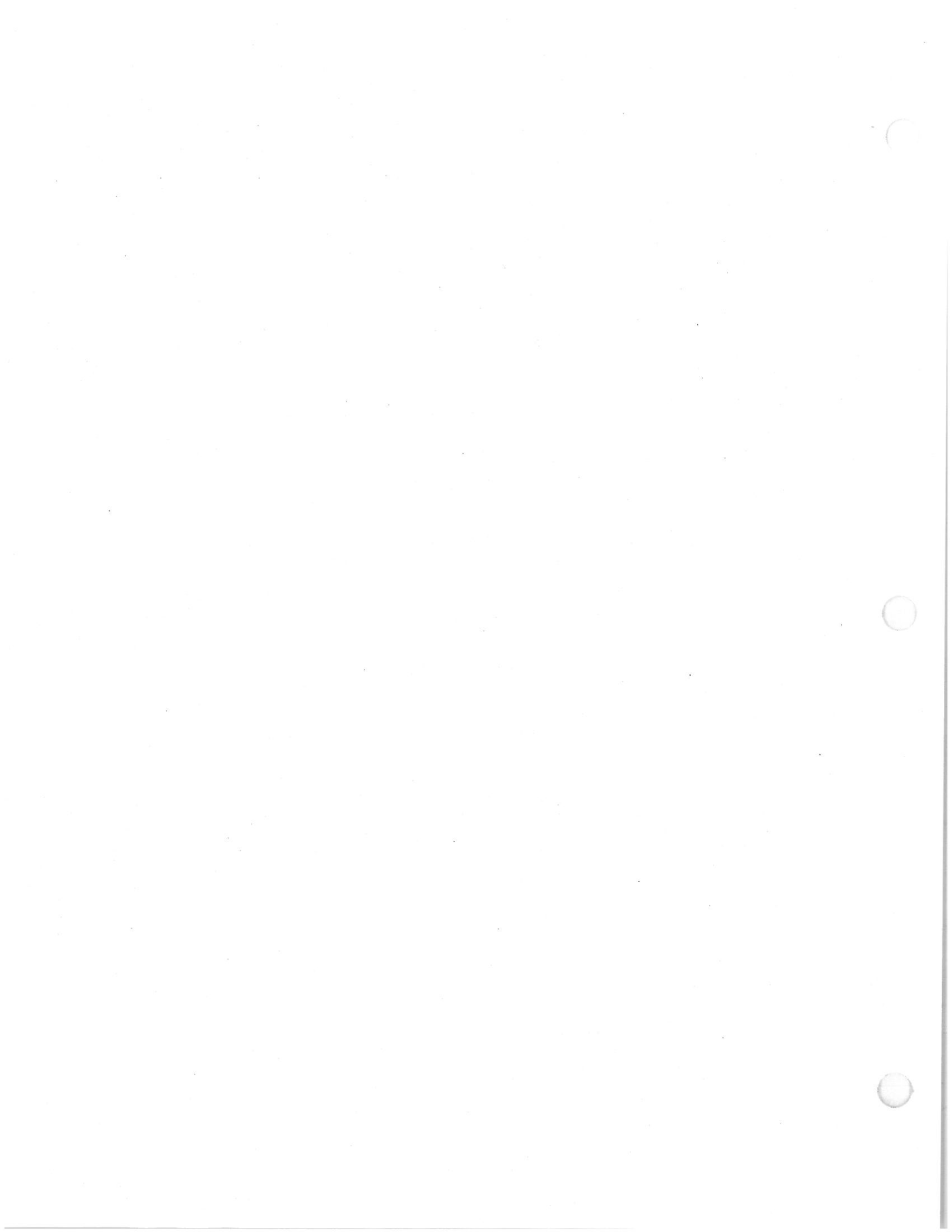
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- 12) **Q- What is zoonosis?**
A- An infection transmissible under natural conditions from animals to humans
S- IDET (298)
- 13) **Q- What micro-mineral is needed for the synthesis of thyroid hormones?**
A- Iodine
S- EqSci (138)
- 14) **Q- What vice is described as a rhythmical swaying back and forth while standing in the stall?**
A- Weaving
S- EVANS2 (184)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- Name the first part of the digestive system.
A- Mouth
S- EVANS2 (190)
- 16) **BONUS**
Q- Approximately how long after ingestion will the food particles of a hay and grain ration appear in the feces?
A- Sixty five to seventy five (65-75) hours
S- EVANS2 (194)
- 17) **Q- Which form of melanin controls the colors black and brown?**
A- Eumelanin
S- EqSci (93)
- 18) **Q- What is the average weight of draft horse breeds?**
A- Sixteen hundred to twenty two hundred (1600-2200) pounds
S- EVANS2 (69)
- 19) **Q- How many ligaments attach to the patella?**
A- Three (3)
S- EVANS2 (691)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- Name one (1) breed of horse that may have Hemophilia A?
A- Thoroughbred, Standardbreds and Quarter Horses
S- EqSci (99)
- 21) **BONUS**
Q- Give the additional names for the following vitamins: vitamins B1, B2 B6 and B12.
A- Vitamin B1- Thiamin, Vitamin B2- Riboflavin, Vitamin B6- Pyroxidine, Vitamin B12- Cobalamin
S- EqSci (126-127)
- 22) **Q- Name three (3) items that are important to consider when selecting a vehicle to pull a horse trailer.**
A- Truck size, engine size, brake system, electrical system, type of hitch, correct hitch ball size.
S- HIH (1155-1)

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- 23) **Q- What color is of a more or less uniform mixture of white with black hairs on the body, but usually darker on head and lower legs and can have a few red hairs in the mixture?**
A-Blue Roan
S- HIH (140-1)
- 24) **Q- In young horses, between what two ages do all of the following changes take place: all twelve (12) deciduous incisors and all twelve (12) premolars are shed and replaced with permanent teeth, and eight molars erupt?**
A- Between two and a half to four and a half (2 1/2 and 4 1/2) years old.
S- HIH (405-1)
- 25) **Q-Free-ranging horses will spend an average of how many hours per day grazing if there is good forage?**
A- Ten to twelve (10-12) hours per day.
S- HIH (425-5)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q-How long does it take for a foal infected with Equine Rhinopneumonitis to perish?
A- Forty eight to seventy two (48-72) hours.
S- HIH (610-1)
- 27) **BONUS**
Q- The femoropatellar and femorotibial joints make up what joint in the horse's body?
A- Stifle
S- LEWIS2 (120)
- 28) **Q- Define an "easy keeper".**
A- An animal that requires less feed than others under a similar condition.
S- LEWIS2 (199)
- 29) **Q- An excess or deficiency of what mineral may cause Goiter?**
A- Iodine
S- LEWIS2 (21)
- 30) **Q- Why is colostrum important for the foal?**
A- So the foal can have antibodies to fight off diseases.
S-Lewis2 (254)
- 31) **Q- A localized collection of pus in the tissues of the body, often accompanied by swelling and inflammation.**
A- Abscess
S- Lewis2 (380)
- 32) **Q- What do you call a gelding that acts like a stallion?**
A- Rig
S- LEWIS2 (401)

END OF ROUND NINE



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Round Ten

Toss Up Questions

- 1) **Q- What is the main purpose of feeding a horse psyllium?**
A- Reducing sand or dirt colic
S- LEWIS2 (409)
- 2) **Q- Which is the most commonly fed type of bran in North America?**
A- Wheat bran
S- LEWIS2 (95)
- 3) **Q- What is another name for monkey-mouth?**
A- Sow mouthed or prognathia
S- LEWIS2 (396)
- 4) **Q- Where does the influenza virus multiply in the horse?**
A- In the epithelial cells of the horse's upper respiratory tract
S- HIH (605-1)
- 5) **Q- When should you start training foals to accept foot handling?**
A- Minutes after birth
S- HIH (525-2)
- 6) **Q- What type of shoe is used on western pleasure horses to keep the feet closer to the ground, which allows the horse to have a freer, longer stride?**
A- Aluminum
S- HIH (515-4)
- 7) **Q- What is the name of an inflammation of the sesamoid?**
A- Navicular disease
S- EVANS2 (98)
- 8) **Q- What type of animal does the ADMS register?**
A- Donkeys and mules
S- EVANS2 (97)
- 9) **Q- At what age does the first premolar erupt?**
A- Five to six (5-6) months
S- EVANS2 (93)
- 10) **Q- What kingdom does the horse belong to?**
A- Animalia
S- EqSci (15)
- 11) **Q- What is cauterizing?**
A- Burning away unhealthy tissue with a hot iron, electric current, or chemical substance
S- IDET (52)
- 12) **Q- What are the two (2) major signs of colitis X, a complex, severe, often fatal disorder related to stress?**
A- fever and diarrhea
S- IDET (61)

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Round Ten

- 13) **Q- Red marrow produces red blood cells, what does yellow marrow produce?**
A- Primarily fat cells
S-CAHA (63)
- 14) **Q-What is the function of folic acid in the body?**
A- Production of DNA or red blood cells
S-EqSci (129)
- 15) **TOSS-UP WITH BONUS ATTACHED**
Q- Name two (2) things that influence the style of horseshoe used.
A- 1. Type of work, 2. Terrain worked on, 3. Integrity of the hoof, 4. Size & weight of horse, 5. Variety of ground surface patterns available.
S- AYHC (I221-2L)
- 16) **BONUS**
Q- During what stage of the mare's estrous cycle is the mare receptive to the stallion?
Spell your answer.
A- E S T R U S
S-AYHC (I226-2L)
- 17) **Q- What are the two (2) basic classifications of forages?**
A-Legumes and grasses
S- AYHC (760-1)
- 18) **Q- Name two (2) cereal grains.**
A- Oats, barley, corn wheat, rye, rice, millet, emmer, or spelt.
S- Lewis2 (70)
- 19) **Q- How many acres are in a square mile?**
A- Six hundred and forty (640) Acres
S- LEWIS2 (402)
- 20) **TOSS-UP WITH BONUS ATTACHED**
Q- Where are wind galls found on a horse?
A- On the fetlock, pastern, or above the knee
S- Lewis2 (408)
- 21) **BONUS**
Q- Name three (3) digestive disorders.
A- colic, choking, diarrhea, poisoning
S- LEWIS2 (2)
- 22) **Q- In the first three (3) months after foaling, a mare can produce what percentage of milk per day in relation to her body weight?**
A- Three percent (3%)
S-HIH (750-7)
- 23) **Q- What is another name for the grain sorghum?**
A- Milo
S- HIH (760-6)
- 24) **Q-Bran is primarily used as a source of what in the diet?**
A- Fiber source
S- HIH (760-9)

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Mixed Division
Round Ten

- 25) **Q- What are three (3) signs that a horse is aging?**
A- Sway back, deep hollows above ears, graying hair, change in feeding
S- HIH (450-6)
- 26) **TOSS-UP WITH BONUS ATTACHED**
Q- Sub-solar abscesses may sometimes be referred to as what?
A- A gravel
S- HIH (455-4)
- 27) **BONUS**
Q- Name the two (2) general classifications of muscle.
A- Slow twitch (long term/low power work) & fast twitch (bursts of strength)
S- EVANS2 (99)
- 28) **Q- Name the two (2) of the six (6) joints in the front leg.**
A- The shoulder, elbow, carpus, fetlock, pastern and coffin joints
S- EVANS2 (98)
- 29) **Q- What is the partner mineral of phosphorus?**
A- Calcium
S- EqSci (132)
- 30) **Q- What joint is commonly referred to as the yes-no joint?**
A- atlas-axis joint
S- EVANS2 (96)
- 31) **Q- What does the term four (4) in hand refer to?**
A- Hitch of four (4) horses consisting of two (2) pairs
S- IDET (114)
- 32) **Q- What is pulmonary edema?**
A- Accumulation of fluid in the lungs
S- IDET (222)

END OF ROUND TEN

