2006 Eastern National 4-H Horse Bowl  
Round Eight

One-On-One

1. C1  Q. What happens to the majority of the epithelial cells that make up the hoof wall?
   A. They are keratinized
   S. Evans pg 692  415/4

2. C2  Q. The head of each of the horse’s ribs articulates with what structure?
   A. Vertebrae (Cervical 1st only and thoracic) or spine
   S. Kainer plate 8  410/4

3. C3  Q. What is the name of the muscular structure that controls the release of ingesta from the stomach into the duodenum?
   A. Pylorus or pyloric sphincter muscle
   S. Kainer plate 51  430/4

4. C4  Q. Are red maple leaves more toxic when fresh or when wilted or dried?
   A. Wilted or dried (toxic up to 30 days once dried)
   S. Lewis pg 331  770/4
5. C1  Q. Name the movement of the horse where the horse trots in a very cadenced, floating manner with a marked period of suspension?
   A. Passage
   S. DET pg 205 640/4

6. C2  Q. Therapeutic shoeing to treat limb deviations of a foal needs to be done before what event occurs to the foal’s orthopedic structure.
   A. Before the epiphyseal plates (growth plates) close
   S. HIH 525-3 810/4

7. C3  Q. To eliminate parasite problems from your horse, all of your parasite control procedures are directed to accomplishing what key event?
   A. Interruption of the parasite life cycle
   S. HIH 430-4 835/4

8. C4  Q. The Tevis Cup is the United States’ most famous event in this sport and is ridden over the old Pony Express route from Lake Tahoe to Auburn California. What type of competition is it?
   A. Endurance ride
   S. DET pg 266 1040/4
9. C1  Q. Radiographs and nerve blocks are commonly used to confirm a diagnosis of navicular disease. What other simpler diagnostic instrument or tool can your veterinarian use to best make this diagnosis?

A. Hoof testers

S. YLM 334-2L 815/3

10. C2  Q. When are oak trees most toxic?

A. In the spring when the leaf and flower buds are just opening

S. Lewis pg 304 770/4

11. C3  Q. A heart bar shoe is used to transfer weight from the hoof wall to assist the wall in healing. What part of the hoof is the weight transferred to?

A. The frog

S. YLM 231-3 900/3

12. C4  Q. What plant contains cicutoxin, one of the most poisonous compounds known?

A. Water hemlock

S. Lewis pg 343 770/4

End One-On-One
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Begin Open Questions
13. Q. What functions to transport nutrients, waste products and regulatory substances to the brain and the spinal cord?
   A. CSF – cerebrospinal fluid
   S. Kainer Plate 81 420-3

14. Q. The biggest mistake in most barns is that they are built for human comfort and not equine health. What is the primary fault found in these barns?
   A. Poor ventilation
   S. Evans pg 773 920/3

Toss Up – Bonus Attached
15. Q. (Two Part) What is the term used to describe a horse where all of the permanent incisors are in wear and what is the minimum age of the horse?
   A. Full mouth, 5 years old
   S. YLM 205-2 430/4

Bonus Question
16. Q. (Bonus Question) List four things that you might observe in your pregnant mare that would indicate she is starting the first stage of labor.
   A. Seeks isolation from other horses
      Stops eating
      Becomes restless – pacing, lies down and gets up repeatedly
      Tail swishing
      Sweating
      Frequent urination
      Wax on the end of the teats may fall off and milk starts to drip
   S. Lewis pg 245, Evans pg 417 510/4
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Resume Open Questions

17. Q. The Kimberwicke bit is considered a leverage bit. How is it different from a typical leverage bit like a curb bit?
   
   A. The Kimberwicke does not have shanks. It also uses slots on top of the rings for attachment of a curb chain to provide leverage.
   
   S. IDET 161, HIH 1100-9 1000/4

18. Q. What is the proper term for the fluid that separates from red blood cells after they coagulate?
   
   A. Serum
   
   S. Lewis pg 403 440/4

19. Q. What term is used to describe a horse that can both pace and trot with good speed?
   
   A. Double-gaited
   
   S. DET pg 84 1040/4

Toss Up – Bonus Attached

20. Q. (Two part) What are the two primary purposes of the epididymis?
   
   A. Storage and maturation of the sperm
   
   S. HIH 920-4, IDET 97 480/3
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Bonus

21. Q. (Bonus question) List four things a farrier should observe before removing and replacing the shoes on your horse.

A. 1. Observe your horse in motion – evaluate for lameness or interference
2. Observe the conformation of your horse and note any conformation problems
3. Observe the foot axis of each foot to determine geometric balance
4. Note any deformities or abnormalities of the foot.
5. Clean the hoof and note the position of the wear on the shoes
6. Note the type or style of the shoe on your horse and whether it is appropriate
7. Talk with the owner about the horse’s use and any gait problems.
8. Discuss with the owner shoe preference and cost.

S. YLM 321-1 900/4

Resume Open Questions

22. Q. When fencing horses, what is the most effective way to use an electric fence?

A. In conjunction with another fence using the electric fence at the top of the fence to keep the horses off of the other fence.

S. Evans pg 766 920/4

23. Q. Identify one plant that can cause cardiac glycoside poisoning.

A. Milkweed; foxglove; oleander; yellow oleander; be-still or lucky nut tree; lily of the valley; dogbane or Indian hemp

S. Lewis pg 337 - 339 770/4
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24. Q. Shaping or dressing the hoof is done to remove any outward distortion of the hoof wall before applying the shoe. What is the maximum amount of hoof wall that can be removed without excessively thinning and weakening the wall?
   A. One half of the thickness of the wall.
   S. HIH 535-4 900/4

25. Q. Why would you choose to use a dropped noseband for your horse?
   A. To keep the mouth closed
   S. DET pg 86 1000/3

Toss Up – Bonus Attached

26. Q. (Two Part) What are the two primary hormones the horse’s adrenal gland releases?
   A. Epinephrine (adrenalin), cortisol (corticoids or corticosteroids)
   S. Evans pg 127 490/4

Bonus

27. Q. (Bonus Question) In the cascade from Gross Energy to Net Energy, energy is lost through a variety of processes. Name three of the four sources of loss.
   A. Feces, urine, gases, and metabolism of food (process of digestion and absorption).
   S. Lewis pg 9 710/3
Resume Open Questions

28. Q. What is the proper name for the substance produced by the skin which coats each hair and causes it to lie flat and gives them a shine?
   A. Sebum
   S. Lewis pg 179 460/3

29. Q. Fresh forage that is cut, chopped and fed that same day is called what?
   A. Green chop or soilage (Do not accept haylage)
   S. Lewis pg 66 700/3

30. Q. It is rare that a horse is poisoned by a single mouthful of a toxic plant. Name one of the two plants that are considered to be the exception to this rule.
   A. Water hemlock or yew
   S. Lewis pg 301 770/4

31. Q. What is the minimum height of perimeter pasture fencing?
   A. 5 feet
   S. HIH 350-1, Evans pg 760 920/3

Last Question of the Round

32. Q. Using the proper term, what structure is being described? This structure is composed of cardiac muscle, it is the middle and thickest layer of the heart wall and is responsible for contraction of the heart.
   A. Myocardium or myocardial muscle
   S. DET pg. 185 440/4