2005 Eastern National 4-H Horse Bowl
Round Seven

One-On-One

1. C1 Q. What is the mucus membrane that lines the eyelids and covers part of the eyeball called?
   A. Conjunctiva
   S. DET pg 67 420/3

2. C2 Q. What is the function of the pyloric sphincter muscle?
   A. Controls the release of stomach contents into the duodenum
   S. Kainer plate 51 430/3

3. C3 Q. What disc shaped structures in the horse’s blood are mainly responsible for coagulation?
   A. Platelets or thrombocytes
   S. DET 214, Kainer Plate 63 440/3

4. C4 Q. What structure connects the kidney to the bladder?
   A. Ureter
   S. Kainer plate 68 470/3
5. C1  Q. What is the most damaging condition to the quality of stored hay?
   A. Moisture
   S. HIH 710-5  710/4

6. C2  Q. Which parasite of the horse - whose larva do not migrate through the body tissues - will cause intermittent to profuse diarrhea and low grade signs of colic?
   A. Small strongyles
   S. Lewis pg 156  880/4

7. C3  Q. What two things generate the sounds heard from the horse’s heart?
   A. The flow of blood and the closing of the heart valves
   S. Kainer plate 58  440/4

8. C4  Q. Where in the horse’s digestive system does maximum water absorption occur?
   A. Small Colon.
   S. AYHC-YLM-ADV 303-3 L  430/4
9. C1 Q. Vitamin K is essential to what important physiologic function in the horse’s body?
A. Coagulation or clotting
S. Lewis pg 51 440/3

10. C2 Q. What important function does sweating perform for the horse?
A. It dissipates heat - it has a cooling effect on the surface of the body when the sweat evaporates.
S. Evans pg 129, Lewis pg 199 460/3

11. C3 Q. As a horse ages the shape of the incisors changes from oval to what shape?
A. Triangular
S. Kainer plate 49, Evans pg 93 430/4

12. C4 Q. After spermatogenesis occurs in the seminiferous tubules, where in the stallion’s reproductive tract do the sperm go for maturation and storage?
A. Epididymis
S. HIH 920-4 500/3

End One-On-One
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Begin Open Questions

13. Q. What U.S. President was involved in the acquisition of foundation stock that led to the establishment of the Arabian breed registry in the United States?
   A. Ulysses S. Grant
   S. HIH 150-1  200/3

14. Q. The hindgut of the horse is a site of active microbial digestion of fibrous feeds into what primary energy source for the horse?
   A. Volatile fatty acids (VFA)
   S. HIH 710-2  430-3

Toss Up – Bonus Attached

15. Q. Name the two major vessels that carry blood from the heart to the abdomen and return blood from the abdomen back to the heart.
   A. Aorta and the caudal vena cava
   S. Kainer plate 57  440/4

Bonus Question

16. Q. Bonus question: Sebum is produced by the skin and coats each hair. Name four functions of sebum.
   A. 1 – Causes hair to lie flat
       2 – Gives the hair coat a shine
       3 – Helps the hair repel water
       4 – Lubricates the skin
       5 – Inhibits the growth of microorganisms
       6 – Increases the adherence of dirt and dust to the hair (absorbs sweat and repels insects)
   S. Lewis pg 179  460/4
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Resume Open Questions

17. Q. How many furlongs are run in the third Triple Crown race held at Belmont?
   A. 12 furlongs
   S. DET pg 27 1040/3

18. Q. What is an inflammation or infection of the lining of the uterus called?
   A. Endometritis
   S. DET pg 92 845/4

19. Q. What is the name for chemical substances that stimulate and regulate physiological processes?
   A. Hormones
   S. Evans pg 126, DET pg 143 490/3

Toss Up – Bonus Attached

20. Q. Name the two types of gait defects classified as supporting leg interferences.
   A. Brushing and striking
   S. Evans pg 179 600/3
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Bonus

21.  Q.  Bonus question: There are four classes of horses based upon their nutritional class or status in life. Name the classes.

A.  Growing Horse (Weanlings & Yearlings)
    Mature Idle (accept mature)
    Producing (Late Gestation Mares & Lactating Mares)
    Working

S.  AYHC-YLM-B 103-1 L  710/3

Resume Open Questions

22.  Q.  During the winter months what would be a proper term to classify the natural status of the mare’s reproductive cycle?

A.  Anestrus

S.  HIH 910-5  500/3

23.  Q.  What factor at harvest would cause the baled hay to become moldy, and will generate heat that will cause a loss of vitamin content, decrease protein digestibility and possibly lead to spontaneous combustion.

A.  Baling the hay too wet – high moisture content – greater than 20%

S.  AYHC-YLM-ADV 337-2 L, Lewis pg 115, HIH 750-4  700/4

24.  Q.  What portion of the hoof wall is the thickest to give it more strength at the point of greatest wear?

A.  Toe

S.  AYHC-YLM-BEG 106-1 L  460/3
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25. Q. Feeding forages from the ground results in significant losses primarily from loss of the leaves. What other problem causes a portion of the feed to be rendered unpalatable?

A. Fecal and urine contamination, mud/dirt

S. Lewis pg 148  710/3

Toss Up – Bonus Attached

26. Q. The horse will be more likely to experience a salt deficiency as a result of what two physiological activities?

A. Lactation and sweating

S. Lewis pg 27  750/3

Bonus

27. Q. Bonus question: What are four physical signs the mare will exhibit when preparing to foal within the next five hours?

A. Leaves herd/isolation  Frequent urination
   Stops eating  Sweating
   Tail switching  Water breaks
   Restless (paces, gets up & down repeatedly)

S. Lewis pg 245  500/4

Resume Open Questions

28. Q. What is the name for the conformation defect where the maxillary incisors are prominent and buck–toothed and the mandible is receded?

A. Parrot Mouth or overshot jaw

S. Evans pg 144, DET pg 204  620/2
29. Q. What is the primary function of the myometrium at the birth of the foal?

A. It is responsible for the powerful contractions which expels the foal at birth?

S. HIH 910-3 500/4

30. Q. What conformation defect may lead to the development of bone spavin and when a horse with this conformation is observed from the rear, the hind limbs are base narrow to the hocks and base wide from the hocks to the feet?

A. Cow-hocked

S. Kainer plate 40 600/4

31. Q. What term would be used to describe the protrusion of the intestines though the abdominal wall?

A. Hernia

S. DET pg 139 805/3

Last Question of the Round

32. Q. What is the name of the structure that allows foals to eat without permitting the dam to have access to the feed?

A. Creep Feeder

S. DET pg 72, Lewis pg 268-9 710/3