

2008 Senior State 4-H Horse Bowl Round Eleven

One-On-One

1. C1 Q. What vein running in the neck of the horse and returning blood to the cranial vena cava is commonly used to draw blood samples from the horse?
- A. Jugular vein
- S. Kainer plate 59, 61 440/4
2. C2 Q. If the mare is having difficulty with delivery of the foal – dystocia – what is the one thing you can do to slow down the parturition process while waiting for the veterinarian to arrive?
- A. Walk the mare (also accept tranquilize)
- S. HIH 940-4 510/4
3. C3 Q. The ilium and ischium are two of the bones that make up what structure of the horse?
- A. Pelvis
- S. Kainer plate 28, DET 156 410/4
4. C4 Q. As forages mature, and the percentage of lignin and structural carbohydrates increases, what happens to the digestibility of the forage?
- A. Digestibility decreases
- S. YLM 337-1L, Lewis 68, 700/4

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5. C1 Q. What is the term for the cloth that is draped across the lap of passengers to keep them warm and dry when riding in a carriage?
- A. Apron or rug
- S. DET 14, 237 1050/4
6. C2 Q. What organ, that produces lymphocytes and is located in the cranial mediastinum of the thorax is at its largest in the foal at six to eight weeks and decreases in size with age, becoming difficult to find in older horses?
- A. Thymus
- S. Kainer plate 63 440/5
7. C3 Q. Botulism is a relatively uncommon, but very acute and highly fatal feed related toxicity in horses, particularly foals. What is the term used to describe a foal with this problem?
- A. Shaker foal
- S. Lewis 347 770/4
8. C4 Q. What function does the sinoatrial node in the wall of the right atrium perform that is essential to the heart?
- A. It is the pacemaker for the heart
- S. Kainer plate 58 440/5

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9. C1 Q. Which breed of horse originated in Mexico as a result of crossing Andalusian stallions with Quarter Horse mares?
- A. Azteca (not Galiceno – pony)
- S. DET 19 200/5
10. C2 Q. What is the proper term for the layers of loose and dense fibrous connective tissue that are found superficially under the skin and deep covering the muscles?
- A. Fascia
- S. Kainer plate 15 410/4
11. C3 Q. What can be inserted into the horse through the ventral meatus?
- A. Nasogastric tube or endoscope
- S. Kainer plate 65 450/5
12. C4 Q. Even in winter, access to water is absolutely essential for horses. The horse will willingly consume adequate quantity of water in the winter if the water is kept above what minimum temperature?
- A. 45 degrees Fahrenheit (accept anything in range 40 to 50 degrees F or 7 to 9 degrees C)
- S. YLM 104-1L 920/4

End One-On-One

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Begin Open Questions

13. Q. The stay apparatus is a system of muscles, ligaments and tendons that's purpose is commonly thought to lock the legs to allow a horse to rest while standing. Name one of the two other functions this apparatus performs.
- A. Helps reduce concussion or prevent overextension
- S. DET 254, Evans 708, Kainer 21, 36 410/5
14. Q. Once the follicle has ruptured and released the ova the luteal phase begins. The corpus luteum begins to form and is responsible for the release of what hormone?
- A. Progesterone
- S. HIH 910-6. YLM 326-3L 510/3
15. Q. Name one of the structures the hyoid bones support?
- A. The larynx, base of the tongue, guttural pouches, and pharynx
- S. Kainer plate 42, DET 146 410/4
16. Q. What hormone produced by the pituitary gland increases during the second stage of parturition and works to increase uterine contractions and encourage milk let-down?
- A. Oxytocin
- S. Evans 340, Lewis 398, DET 200 510/4

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Toss Up – Bonus Attached

17. Two part Q. What does “TDS” stand for? What does TDS indicate about water quality?
- A. Total Dissolved Solids. High TDS indicate water that may be contaminated or unfit for consumption or have a high salinity.
- S. Lewis 7 700/5

Bonus Question

18. Q. When hitching horses one in front of the other, what are the correct terms for a two, three, and four horse hitch?
- A. Two-tandem
Three-random
Four-quadrem
- S. DET 225, 229, 263 1050/5

Resume Open Questions

19. Q. Why is a five diamond V-mesh wire considered the safest wire fencing to be used for all horses?
- A. The close weave (small openings) keeps even foals from catching their foot in it.
- S. HIH 350-3 920/3
20. Q. What is the name of coat markings or areas of the skin where there is no pigment?
- A. Flesh marks
- S. DET 110 310/4

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21. Q. The Sertoli cells in the stallion's testes stimulate spermatogenesis in the stallion. What hormone from the pituitary gland controls the Sertoli cells?
- A. FSH (Follicle Stimulating Hormone)
- S. YLM 327-1 520/5
22. Q. A coon-footed horse has too much slope at what joint?
- A. Pastern
- S. YLM 323-2L 600/3
23. Q. Equine Herpes Virus causes the respiratory disease in horses. One strain of the virus, EHV-1 can also cause what other problem?
- A. Abortion in pregnant mares (also accept either birth of weak foals or a paralytic neurological disease)
- S. HIH 445-6 880/3

Toss Up – Bonus Attached

24. Q. The autonomic nervous system regulates many of the internal operations of the body and unconscious responses to external stimuli. What are the two divisions the autonomic nervous system is divided into?
- A. Sympathetic and parasympathetic
- S. DET 18, Kainer 80 420/5

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Bonus Question

25. Q. Name four things whose length is determined by shoulder angle.
- A. Length of neck Length of Stride
 Length of back Depth of hearth girth
 (do not accept angle of pastern – is not a change in length)
- S. YLM 223-2L 620/4

Resume Open Questions

26. Q. Which part of the horse’s brain controls the coordination of movement?
- A. Cerebellum
- S. DET 53 420/4
27. Q. What type of protective boots would reining or roping horses wear to protect the rear portion of the fetlocks from injury or abrasion during sliding stops?
- A. Skid boots
- S. DET 246 1000/4
28. Q. Why is the hoof wall harder at the toe than at the quarters?
- A. Because the toe is further from the coronary band and therefore more keratinized
- S. HIH 505-4 480/3
29. Q. The seminiferous tubule is the functional unit of what organ in the horse?
- A. Testicle
- S. HIH 357 520/3

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Last Question of the Round

30. Q. In measuring respiratory capabilities of the horse, tidal volume and respiratory rate are used to determine what respiratory parameter?
- A. Minute volume (total amount of air inspired or expired per minute)
- S. HIH 810-1 450/3