

**2006 New York State Senior 4-H Horse Bowl
Round Nine**

One-On-One

1. C1 Q. What structure in the mid brain of the horse is responsible for the coordination of the estrous cycle and the long-term control of seasonal reproductive activation?

A. Hypothalamus.

S. HIH 910-5, AYHC-YLM-ADV 326-2 L 480/4

2. C2 Q. The Leydig cells in the stallion are located between the seminiferous tubules and under the control of LH. What hormone do they produce?

A. Testosterone.

S. AYHC-YLM-ADV 327-1 L 480/3

3. C3 Q. The Paso Fino performs a unique four-beat lateral gait that is essentially a broken pace that can be performed at three different speeds. What is the name for the fastest of these three?

A. Paso largo.

S. Evans pg 178 640/4

4. C4 Q. What joint is abnormal in angle in a post legged horse?

A. The hock – too little angle.

S. DET pg 219 600/4

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5. C1 Q. What would you call forage that has been fermented and stored in anaerobic conditions?
- A. Silage or haylage.
- S. AYHC-YLM-ADV 302-1 L 700/4
6. C2 Q. To feed a mature 1000lb horse on pasture only for the 6 to 7 month grazing season, assuming average soil and temperate weather conditions, how many acres of good quality pasture would be needed?
- A. 2-3 acres (accept anything in 2-3 acre range).
- S. HIH 730-1 710/4
7. C3 Q. If you are using a continuous deworming program for your horse, what internal parasite are you not controlling?
- A. Bots.
- S. HIH 430-7 880/4
8. C4 Q. What is the proper term for the behavior category that involves horses signaling for care or attention by calling or movement?
- A. Et-epimeletic.
- S. Evans pg 676 900/4

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9. C1 Q. Why does the hair on a freeze branded area turn white?
A. The freezing destroys the pigment cells of the skin.
S. Evans pg 809 1100/4
10. C2 Q. Feeds being processed by the horse's digestive tract spend the longest period of time in what part of the tract?
A. Large intestine (Cecum and large colon 36 to 72 hours).
S. AYHC-YLM-INT 203-1 L 430/4
11. C3 Q. If you measure the distance from where one hoof leaves the ground to where same foot again hits the ground what have you just measured?
A. Stride length.
S. DET pg 258 600/2
12. C4 Q. What is the term used to describe the dental status of a horse with all adult incisors in wear at five years of age?
A. Full mouth.
S. AYHC-YLM-INT 205-1 430/4

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13. C1 Q. Two parts: What anatomical structure is enlarged in goiter and what causes it?
- A. An enlarged thyroid gland caused by an iodine deficiency or excess.
- S. Lewis pg 34, DET pg 122 490/4
14. C2 Q. What organ functions to increase the oxygen carrying capacity of the blood in strenuous exercise by releasing the red blood cells it stores?
- A. Spleen.
- S. HIH 850-4 440/4
15. C3 Q. Which two vitamins are supplied entirely by the diet because they are not produced by the horse's body?
- A. Vitamins A and E.
- S. Lewis pg 42. 740/4
16. C4 Q. When the horse is undergoing strenuous exercise the muscles require energy to function in the form of ATP. Is the production of ATP more efficient in an aerobic or anaerobic environment?
- A. Aerobic environment.
- S. AYHC-YLM-ADV 325-3 L 410/5

End One-On-One

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Begin Open Questions

17. Q. Repeated exposure to sweat, mud and filth in the fetlock and heel area may predispose the horse to what disease?
- A. Scratches or grease heel.
- S. Evans pg 601 835/2
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18. Q. What disease is caused by the *Ehrlichia risticii* (previously identified as *Rickettsia erlichia*) and was first identified in 1979 in the Potomac Valley area.
- A. Potomac Horse Fever.
- S. Evans pg 602, DET 218 890/3
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19. Q. What exercise would you choose for a horse that would minimize trauma to the feet and legs by concussion, but would still allow work to increase stamina, wind and muscle tone.
- A. Swimming.
- S. Evans pg 784 1100/2
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20. Q. What is the name of the band of tissue that lies between the hoof wall and the skin at the distal end of the pastern and is the tissue from which the hoof wall grows?
- A. Coronet or coronary band.
- S. DET pg 69, Lewis pg 386 460/4

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Toss Up – Bonus Attached

21. Q. Two-part question: *Habronema* is commonly known as stomach worms, but it rarely causes major problems with the horse's stomach. What organ system does it affect and what is the common name for this problem?

A. Integument (around the eyes) and “summer sores”.

S. Lewis pg 158 880/5

Bonus

22. Q. Bonus question: What are three functions estrogens play in the mare's estrous cycle?

A. 1 – Stimulate receptive behavior of the mare to the stallion.
2 – Prepare the uterus for conception.
3 – Stimulate the pituitary gland to release LH (Leutenizing Hormone).

S. HIH 910-6 480/4

Resume Open Questions

23. Q. The horse can rest when the joints of the extremities are locked in position by a system of muscles and ligaments. What is this mechanism called?

A. Stay apparatus.

S. Evans pg 708, Kainer plate 21 & 36 410/3

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24. Q. If your horse indulges in the escape vice of kicking the stall wall, what leg blemish most commonly can occur?
- A. Capped hock.
- S. Lewis pg 371 & 384 620/3
25. Q. What happens to the total nutrient content of hay when it is over-cured, and baled with too low a moisture content?
- A. The nutrient content decreases because the leaves shatter and fall off.
- S. HIH. 750-4 700/3

Toss Up – Bonus Attached

26. Q. Two-part question: What category of bones make up the carpus joint? How many bones are found in the carpus?
- A. Short bones, 7 or 8 (accept either).
- S. Evans pg 90 & 684 400/3

Bonus

27. Q. Bonus question: Name the three serous membranes that line the abdominal and thoracic cavities and surround the heart.
- A. 1 – Thoracic cavity – pleura.
2 – Abdominal cavity – peritoneum.
3 – Surrounding the heart – pericardial.
- S. Kainer plate 56 440/4

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Resume Open Questions

28. Q. If a horse is a “grade horse” what does this imply about its pedigree?
- A. It is a horse of unknown or non-registered ancestry or breeding, not a purebred or of mixed stock unable to be registered, or the horse itself is not registered.
- S. HIH 110-5, DET pg 123 200/3
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29. Q. The final or fourth stage of labor occurs after the foal has been presented. What structure is expelled from the mare during this stage of labor?
- A. Placenta.
- S. Lewis pg 246 500/3

Last Question of the Round

30. Q. What is the common name for the unsoundness where the cranial nuchal bursa located dorsal to the first cervical vertebrae becomes infected?
- A. Poll Evil.
- S. Evans pg 168, Kainer plate 20, Lewis pg 400 620/4