

**2007 NYS 4-H Horse Bowl  
Round Nine**

**One-On-One**

1. C1      Q.    The frontal bone, zygomatic bone, and lacrimal bone form what anatomic structure?
- A.    Orbit
- S.    Kainer Plate 41, DET pg 247                      410/4
- 
2. C2      Q.    When feeding a pelleted or extruded feed made from the same ingredients, why would it be important to feed by weight and not by volume?
- A.    The extruded food is expanded during production resulting in air being trapped in the feed making it necessary to feed a larger volume to get the same nutrient value.
- S.    Evans pg 280, Lewis pg 92                      700/4
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3. C3      Q.    The equine liver will function at near optimal levels until approximately what percent of it is destroyed?
- A.    80 % (accept 70 to 80 %)
- S.    Lewis pg 308    800/4
- 
4. C4      Q.    What does a skin pliability test check for?
- A.    Dehydration
- S.    YLM 115-1    870/3





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**Begin Open Questions**

13. Q. Where would you find a “stabilizer” or “roper’s” bar?
- A. On a bit, connecting the shanks where the rein loops are attached.
- S. DET pg 67 1000/4
14. Q. What product do the apocrine tubular glands located in the dermis layer of the skin produce?
- A. Sweat
- S. Kainer plate 5 460/3
15. Q. You are using a hoof tester as part of a lameness evaluation of the horse’s right forelimb. You consistently notice sensitivity with pressure at a specific location. What else would you do with the hoof tester to confirm this as a possible basis for your lameness diagnosis?
- A. Compare the response to the left forelimb hoof.
- S. HIH 530-3 815/5
16. Q. What structure of the hoof am I? I am very elastic and have few blood vessels or nerve endings. I am located between the lateral cartilages and absorb concussive forces from the pastern coffin bones and frog. I am wedge shaped and composed of fibrous tissue and fat.
- A. Digital cushion
- S. HIH 505-4 415/4
17. Q. What is the stage of the mare’s estrous cycle that follows her estrus or heat and lasts approximately 14-15 days until she is either pregnant or reverts back to anestrus?

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A. Diestrus

S. DET pg 81, YLM 326-2                      480/3

**Toss Up – Bonus Attached**

18 Q. (Two Part) If the horse has a fracture of the olecranon, what bone and joint would be involved?

A. Ulna, elbow

S. Kainer plate 10                                      410/4

**Bonus Question**

19 Q. (Bonus question) Name four advantages of barn/stall housing for horses compared to run-in shelters and pasture.

A. Able to monitor diet                      Safer from horse-horse injury  
Able to control exercise  
Horses kept cleaner  
Horses readily available for owners use  
Closer observation  
Easier to medicate

S. Evans pg 773                                      920/3

**Resume Open Questions**

20 Q. One of the advantages of open front shelters or run-in sheds is their better ventilation. How would this benefit your horse?

A. Fewer respiratory disease problems

S. Evans pg 772                                      920/3

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- 21 Q. If you were to take the pulse of a normal healthy, physically fit horse that has just been galloping for 5 minutes would you expect the heart rate to be 100, 150 or 200 beats per minute?
- A. 200
- S. Lewis pg 206 440/4
- 22 Q. Name one plant that can cause a Vitamin B1 (Thiamine) deficiency?
- A. Horsetail (snake grass, maretail, horserush) or bracken fern
- S. Lewis pg. 319-320 770/4
- 23 Q. In designing an equine facility, one of the primary considerations is the safety of the horses and the handlers. Design is influenced significantly by one **primary** behavioral response that the horse exhibits as a defensive measure. What is that behavior?
- A. Flight when fearful
- S. HIH 320-1 920/5

**Toss Up – Bonus Attached**

- 24 Q. (Two Part) When horses lick at the areas where bot eggs are attached, what two necessary factors is the horse providing that allows the bot eggs to hatch?
- A. Friction, moisture and warmth
- S. HIH 430-3, Evans pg 635 835/4

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**Bonus**

25 Q. (Bonus Question) Name four things horses shown at Halter Class are judged on.

- A. Type (breed type)
- Conformation
- Quality
- Substance (muscling or condition)
- Soundness (way of going)
- Color
- Sex character

S. DET pg 129

1010/4

**Resume Open Questions**

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Round Nine**

- 26 Q. What is the proper name of the structure of the uterus which is being described? It is composed of two sheets of tissue – one longitudinal and one circular, it is the middle layer, and it is responsible for powerful contractions of the uterus at birth of the foal.
- A. Myometrium
- S. HIH 910-3 480/4
- 27 Q. What is the minimum distance a manure pile should be located from a well used for drinking water.
- A. A minimum of 100 feet
- S. HIH 360-2 920/4
- 28 Q. Which premolars are present as permanent teeth only?
- A. Wolf teeth
- S. HIH 405-1 430/4
- 29 Q. FSH (Follicle Stimulating Hormone) exerts its effect in stimulating spermatogenesis in the stallion by acting on what cells in the testes?
- A. Sertoli cells
- S. YLM 327-1 520/5

**Last Question of the Round**

- 30 Q. What plant causes the disease “trembles” in horses and “milk sickness” in people?
- A. White snakeroot



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S. Lewis pg 320

770/4