

2007 Eastern National 4-H Horse Bowl
Round Five

One-On-One

1. C1 Q. What is the name of the pigment that is responsible for the color of the skin, hair, and eyes?
- A. Melanin (not melatonin)
- S. DET 178, Evans 129 300/3
2. C2 Q. Considering the digestive tract anatomy of the horse, why is it recommended to feed a horse two or three times a day instead of once a day?
- A. The horse has a relatively small stomach.
- S. Evans 202 700/3
3. C3 Q. The genotype of the horse is its genetic makeup. What would be the term used to describe its outward appearance and the physical traits that are visible?
- A. Phenotype
- S. DET 211 550/2
4. C4 Q. The forces exerted by muscles in the distal foreleg are transmitted by tendons. Generally muscles are not found below what joint of the foreleg.
- A. Carpus (knee)
- S. Kainer plate 19 410/3

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5. C1 Q. The Jockey Club maintains the registry of Thoroughbreds for the United States, Canada and Puerto Rico. What is the proper name of the register?
- A. The American Stud Book
- S. HIH 157-1 200/3
6. C2 Q. Ehrlichia risticii (air-lick-e-ah ris-tee-chee) is the causative agent of what equine disease?
- A. Potomac Horse Fever
- S. HIH 650-1 800/3
7. C3 Q. Curb is an inflammation of the long plantar ligament of the hock. What conformational defect predisposes a horse to a curb?
- A. Sickie Hocks
- S. HIH 230-7, DET 74, Kainer plate 32 620/3
8. C4 Q. You have just finished installing a beautiful white painted board fence around your pastures but you have a problem. Your horses are fighting over the fence and leaning into it and over it. What can you do to keep the horses off the fence?
- A. Install electric wire on top board inside each side of the fence
- S. Evans 766, Lewis 184-5 920/3

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9. C1 Q. What is the best way to carry a load on a crossbuck saddle?
A. In panniers
S. HIH 1125-1 1020/3
10. C2 Q. Saddle chafes and shoulder rubs from poorly fitted saddles or other tack will create what type of wound on your horse?
A. Abrasion
S. YLM 109-1L 860/2
11. C3 Q. The poison cantharidin (can-thar-i-din) is a highly irritating substance that produces inflammation and blistering within hours of contact. What common pest of alfalfa is this toxin found in?
A. Blister beetle
S. Lewis 365, DET 46 770/3
12. C4 Q. A weight evaluation of your horse can be made more valuable in assessing the overall health of your horse by using what technique to determine your horse's body fat level?
A. Body condition score
S. HIH 720-3 700/3

End One-On-One

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Begin Open Questions

13. Q. The long pastern, cannon, and proximal sesamoid bones comprise what joint of the horse?
- A. The fetlock joint (ankle)
- S. Kainer plate 12, 14 410/2
14. Q. What bit is being described? This bit is sometimes called a cowboy snaffle. It is a curb bit with short, straight, swivel shanks and a broken mouthpiece.
- A. Tom Thumb bit
- S. DET 270 1000/4

Toss Up – Bonus Attached

15. Q. Name two by-products that can be added to a horse's ration as a source of additional fiber.
- A. Beet pulp, wheat bran, or brewer's dried grains
- S. HIH 760-8 700/3

Bonus Question

16. Q. Compare the normal heart rate and respiratory rate of the adult horse at rest to the one week old foal.
- A. Accept any answers in the following ranges
- Adult horse 35 – 60 beats/min Foal 70 to 100 beats/min
Adult horse 8-16 breaths/min Foal 20-40 breaths/min
- S. YLM 115-1L, HIH 950-3, Evans 108, 111 530/3

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Resume Open Questions

17. Q. What sound does a horse make in response to anger?
- A. Squeal
- S. Lewis 153, DET 253 910/3
18. Q. What is the common name for the disease being described? It is caused by anaerobic bacteria, usually as a result of wet and unsanitary conditions. The area of the commissures or sulcus is black and has a pungent odor and the frog is being damaged.
- A. Thrush
- S. YLM 334-1L, DET 268 815/3
19. Q. If you are using a stock saddle for packing, what piece of equipment that goes around the base of the horse's tail and attaches to the saddle would you use to keep the pack load centered?
- A. Croupier (crupper)
- S. YLM 118-2L, DET74 1020/3

Toss Up – Bonus Attached

20. Q. Name two clear or translucent structures that light must pass through to reach the retina in the horse's eye.
- A. Cornea and lens
- S. DET 102, Evans 123 420/3

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Bonus Question

21. Q. From distal to proximal, name the seven joints of the caudal leg.
- A. Coffin, pastern, fetlock (ankle), hock, stifle (not knee), hip, and sacroiliac
- S. Evans 98 410/3

Resume Open Questions

22. Q. What is the most common use of a liverpool bit?
- A. Used for driving (reference specifies heavy harness or plow horses, but research finds it is used in all disciplines of driving)
- S. DET 170 1000/4
23. Q. What is the term for the pivot point of the back that is the area between the last rib and the croup?
- A. Coupling or loin
- S. HIH 220-6, DET216 600/2
24. Q. Sweating and lactation are two physiological functions that will increase the free choice consumption of water and what other mineral supplement?
- A. Salt (Sodium and chloride)
- S. Evans 236, Lewis 25-6 750/3

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25. Q. What is the proper name for the layer of the uterus that is responsible for the powerful contractions that expel the foal at birth?
- A. Myometrium
- S. HIH 910-3 510/4

Toss Up – Bonus Attached

26. Two part Q Name two diseases caused by the bacteria Clostridia.
- A. Tetanus
Botulism
Foal septicemia (umbilical cord infection)
Enterotoxaemia (overeating disease)
Gangrene (anaerobic muscle infection and septicemia)
- S. Lewis 168, 251 & 361, DET 118, Evans 305 800/3

Bonus Question

27. Q. Straw is popular bedding for horses. Give three advantages or situations where straw is preferred and three disadvantages of using straw as a bedding material.
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|----|---------------|--|--|
| A. | Advantages | Foaling stalls
Comfortable for horse | Very absorbent
Relatively dust free |
| | Disadvantages | Horses eat straw
Highly combustible
Lg. Volume of debris | High labor in cleaning
Lg. Amount of storage
Difficult to dispose of |
- S. HIH 330-1 920/4

Resume Open Questions

28. Q. You reach into your tool box looking for your hoof nippers and grab what looks like nippers, but they have knobs on the ends of the handles. What tool do you have in hand?
- A. Pull-offs (pinchers, shoe pullers)
- S. HIH 530-1 900/3

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29. Q. What supplement is the preferred plant-source feed supplement in young growing horses because it has a high level of lysine and in general is considered the most economical protein supplement for all horses?
- A. Soybean meal (do not accept soybeans – they are not high in protein and are not recommended for young horses)
- S. YLM 302-1L, Lewis 83, HIH 760-7 760/3
30. Q. The rear third of the coffin bone does not attach directly to the hoof wall. What elastic structure provides the bridge for this attachment and is important in reducing the concussive forces to the hoof?
- A. Lateral Cartilages
- S. HIH 505-4 480/4
31. Q. Which breed registry is the oldest registry for an American breed of horse? It was founded in 1891 in Louisville, KY.
- A. American Saddlebred Horse Association
- S. HIH 156-1 200/4

Last Question of the Round

32. Q. What is the bacterium responsible for the disease being described? This is an acute, highly contagious disease of the upper respiratory tract. It is characterized by fever, depression, nasal discharge and swelling or abscessation of the lymph nodes in the throat area. Its common name is strangles or shipping fever.
- A. Streptococcus equi
- S. Lewis 173 850/3