2007 NYS 4-H Horse Bowl
Round Ten

One-On-One

1. C1 Q. The leaves of hay contain a greater content of non-structural carbohydrates and proteins than the stems. How does this affect their nutritional value?

A. The leaves are more digestible

S. YLM 337-2L 700/4

2. C2 Q. Osteoblasts form a protein matrix that ultimately forms what tissue?

A. Bone

S. Evans pg 227 410/4

3. C3 Q. What is the main clinical symptom of horses that eat clover or alfalfa pasture or hay infected with the fungus *Rhizoctonia leguminicola*?

A. Excessive salivation or slobbers

S. Lewis pg 302 770/5

4. C4 Q. Retention of deciduous teeth (i.e. caps) is most commonly seen in which teeth?

A. Premolars

S. HIH 405-2 430-4

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5. C1 Q. Name one of the two poisons that are found in Johnson and Sudan grasses?

A. Cyanide and nitrates

S. Lewis pg 321 770/4

6. C2 Q. What is a common term for diarrhea, usually found in foals that has many different specific and non-specific causes?

A. Scours

S. DET pg 240 830/4

7. C3 Q. A normal keg shoe has four nail holes on each side. What term is applied to the second and third holes?

A. Quarter nail holes

S. YLM 231-4 900/4

8. C4 Q. What two items can be added to a stock saddle to make it more suitable for packing?

A. Breeching and a breast collar

S. HIH 1125-1 1020-3

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9. C1 Q. How long (in months) do the bot larvae remain attached to the horse's stomach lining before passing out with the manure and pupating into adult flies?

A. 8 to 10 months

S. HIH 430-3 835/5

10. C2 Q. In a ranch operation, what is the purpose of a boundary rider?

A. To ride the fences of the property and repair any problems.

S. DET pg 36 1100/4

11. C3 Q. How many air exchanges per hour should an adequately ventilated barn have?

A. Four to eight

S. YLM 107-2 920/4

12. C4 Q. In race horses, why are traction devices such as toe grabs not being used by trainers as commonly as they use to be?

A. They produce too many injuries

S. YLM – 231-2 1040/4

End One-On-One

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Begin Open Questions

13. Q. When the horse is undergoing strenuous exercise what waste product produced by anaerobic glycolysis causes muscle fatigue?

A. Lactic acid

S. HIH 850-2 410/5

14. Q. A cowboy uses the derisive term "pimple" to describe a piece of English tack. What piece of tack is he referring to?

A. The English saddle

S. DET pg 212 1000/4

15 Q. A pad with stirrups and a cinch used for exercising the horse is called what?

A. A pad saddle, bareback pad or exercise saddle

S. DET pg 202 1000/4

16 Q. Why would you choose to use a rocker-toe horse shoe for a healthy young horse?

A. A rocker-toe shoe eases the breakover of the hoof and to help prevent forging – accept either answer.

S. HIH 525-4 900/5

17 Q. What hormone is produced in the anterior pituitary and is responsible for initiating lactation in the mare?

A. Prolactin

S. DET pg 221, Evans pg 127 480/4

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Toss Up – Bonus Attached

18 Q. (Two Part) Identify two different places in the horse's skeletal structure you would find an interosseus ligament.

A. Attachment of the radius to the ulna and the cannon bones to the splint bones

S. Kainer Plate 14, Evans pg 158-9, DET pg 154 400/4

Bonus Question

19 Q. (Bonus question) What are three functions progesterone plays in the mare's reproductive cycle?

A. 1 – Maintains pregnancy by stimulating the uterus
2 – Inhibits the release of LH by the pituitary gland
3 – Changes the mare's behavior pattern so she will show no signs of estrus

S. HIH 910-6 510/5

Resume Open Questions

20 Q. What fluid excreted by the horse is being described in the following descriptions – cloudy, thick and syrupy, and yellow to orange?

A. Urine (also accept pus)

S. Kainer plate 68 470/3

21 Q. What is the name of the fibro-cartilage structure that is located between the articulating surfaces of the stifle joint?

A. Menisci or meniscus

S. Kainer 13 410/5

22 Q. What is the proper term used to describe the use of a file or rasp to remove the sharp edges or points on the horse's cheek teeth?

A. Floating the teeth (floated)

S. DET pg 110, Kainer plate 48 830/3

23 Q. What is the name of the slender outgrowth of the epidermis that performs a thermoregulatory function?

A. Hair

S. DET pg 128 460/3

Toss Up – Bonus Attached

24 Q. (Two Part) Vitamins are classified as either water or fat soluble. Which classification of vitamin – water or fat soluble – taken in excess would be more likely to be detrimental to a horse? Why?

A. Fat soluble. Fat soluble vitamins are poorly excreted from the body as compared to water soluble, which are easily excreted. Also accept - Fat soluble vitamins are able to be stored, water soluble are not.

S. Lewis pg 42 740/5

Bonus

25 Q. (Bonus question) What are you doing when you are "wringing off" the nail, what tool are you using, and why do you do it?

A. Removing the pointed end of the nail where it exits the hoof

Driving hammer (shoeing hammer) – the claw of the hammer
Making the hoof safe to work with and ready to be clinched

S. HIH 530-2, 535-6 900/5

Resume Open Questions

26 Q. The percentage of a horse's trait that is due to genetics is measured by what?

A. Heritability estimate

S. YLM 335-2, HIH 1020-3 550/5

27 Q. The terms "varus" and "valgus" are used to describe deviations of what structure of the foal?

A. Deviations of the legs – more specifically the knees and hocks.

S. HIH 525-2 810/5

28 Q. Fish are dying in the pond on your farm. Every thing looks normal in the pond. Why might the runoff from your manure pile be causing this?

A Runoff from a manure pile will carry organic matter found in equine feces which will serve as a nutrient source for microorganisms. That process results in decreased oxygen which will not support the fish.

S. HIH360-2 920/5

29 Q. What is the structural, insoluble polysaccharide in carbohydrates?

A. Cellulose

S. Lewis pg 16 730/5

Last Question of the Round

30 Q. In 1985 the horse industry was valued at 15 billion dollars. Which state in the United States made the largest contribution to this total?

A. California

S. Evans pg 11 940/4