# 2017 NC State Horse Bowl Contest Senior Division Round 1

# **BEGIN ONE-ON-ONE QUESTIONS**

<b>C1</b>	1)	Q:	What is the proper name for an immature female horse?
		A:	Filly
		S:	Lewis 2nd(389)
C2	2)	Q:	Crow hop is a term that describes what type of action?
		A:	Mild bucking motions
		S:	Newhor(74)
С3	3)	Q:	What is it called when the lower incisors extend out further than the upper incisors?
		A:	Monkey mouth
		S:	Lewis 2nd(396)
C4	4)	Q:	Give another name for the dorsal stripe.
		A:	Back stripe, lineback, eel stripe, ray
		S:	Griffiths; Newhor(38; 229)
<b>C1</b>	5)	Q:	What term applies to a horse that belongs to a specific breed and has
			"papers" to document its ancestry?
		A:	Registered (or purebred)
		S:	AYHC 1st(110-5)
C2	6)	Q:	What is a general term for the saddle, bridle and other equipment worn
			by a horse when ridden?
		A:	Tack
		S:	Lewis 2nd(406)

**C3** 7) What is the function of the brow band? Q: It is designed to keep the crown piece from sliding down the horse's neck. A: S: AYHC 1st(1100-6) C4 8) Q: What is the name of the many conditioned stimuli that are used in horse training and are given by the rider or trainer? A: Cues S: AYHC 1st(1240-1) **C1** 9) What is the science of the structure of the animal body and the relation of Q: all its parts? A: Anatomy S: Newhor(10) C2 What conformation term describes a horse that is low at the withers and 10) Q: high at the hip? A: Walking downhill or Downhill S: Evans 2nd(135) **C3** 11) Q: How many numbers or factors are there in the Henneke body condition scoring system for horses? A: AYHC 1st(780-2) S: C4 12) Q: What is thrush compared to in humans? A: Athlete's foot S: AYHC 1st(540-1) **BEGIN TOSS UP QUESTIONS** 13) Q: What nutrient is obtained from green plants and hay and is associated with sunlight?

A:

S:

Vitamin D

Newhor(284)

- 14) Q: What is the term used to indicate that a horse may have a structural problem or deviation which may have a limited affect on horse's ability to perform?
  - A: Serviceably sound
  - **S:** AYHC 1st(230-1)

- 15) Q: What is the term for a mare that is producing milk?
  - A: Lactating
  - **S:** Newhor(163)

- 16) Q: Name four draft breeds.
  - **A:** Belgian, Shire, Percheron, Clydesdale, Suffolk, American Cream, Breton, Ardennais, Irish Draft, Jutland, Boulonnais, Noriker, Vladmir, Russian Heavy Draft
  - **S:** Griffiths; Newhor; AYHC 1st(47; 15, 258, 39, 155, 159, 191, 36, 284, 238; 155B)
- 17) Q: What the term describes a horse that is unwilling to be away from the herd for any reason?
  - A: Herd Bound
  - **S:** Newhor(29)
- 18) Q: The conformational defect known as "pigeon-toed" causes the horse to track with what front leg deviation?
  - A: Paddling
  - **S:** Kainer(39)
- 19) Q: A two-beat lateral gait where the front and rear feet on the same side start and land together is known as the what?
  - **A:** Pace
  - **S:** Evans 2nd(31)

20) Q: The back of a Western saddle is referred to as the what?

A: Cantle

**S:** AYHC 1st(1100-4)

#### **BONUS QUESTION**

21) Q: Name 5 signs of colic.

A: Switching tail; looking around at bell; kicking; rolling; pawing; repeatedly lying down and standing up; sweating; urinating and defecating frequently with little output; restlessness, anxiety, depression, isolation; increased heart rate, respiration and/or capillary refill time; pale or bluish mucous membranes; distended abdomen; change in or lack of gut sounds; stretching out as if to urinate, but not urinating

**S:** Griffiths(180)

22) Q: Name the term referring to any type of abdominal pain in horses.

A: colic

**S:** Griffiths(180)

23) Q: During the winter, why should you warm a bit with your hands before putting it in the horse's mouth?

A: An icy bit can temporarily freeze and injure the tongue

**S:** AYHC 1st(420-3)

24) Q: Name the popular American breed of horse originally bred to race a quarter of a mile.

**A:** Quarter Horse

**S:** Newhor(225)

## TOSS UP WITH A BONUS ATTACHED

25) Q: When determining a horse's age by its teeth, which teeth are studied?

**A:** The 12 front teeth or incisors

**S:** AYHC 1st(240-1)

#### **BONUS QUESTION**

The small intestine is composed of three parts. Name them. 26) Q: Duodenum, jejunum, ileum S: Kainer(51) 27) What is the elastic wedge shaped mass between the bars of the foot? Q: A: Frog S: Evans 2nd(695-696) 28) A horse that has been ridden enough to be fairly manageable is known by Q: what term? A: Broke S: Newhor(40) 29) Q: What is the name of the horse trailer safety device whose purpose is to give the horse something to brace against in case the back door comes open? Butt bar A: AYHC 1st(1155-3) 30) Q: What term identifies a horse that seems to require less feed than other horses kept under similar conditions? Easy keeper A: S: Lewis 2nd(195) 31) Q: The primary weight of the horse is supported by what part of the hoof? A: the wall S: AYHC 1st(505-4) 32) Q: What is a term to describe a horse's general attitude toward his handlers

**END OF ROUND 1** 

A:

and other horses?

Disposition

Newhor(82)

# 2017 NC State Horse Bowl Contest Senior Division Round 2

# **BEGIN ONE-ON-ONE QUESTIONS**

A: Alfalfa

**S:** AYHC 1st(760-4)

<b>C1</b>	1)	Q:	What is the best control for flies?
		A:	Removal of waste and decaying organic material.
		S:	Griffiths(52)
C2	2)	Q:	What is another term for California Reins?
		A:	Romal reins or Closed Reins
		S:	AYHC 1st(1100-8)
С3	3)	Q:	The ancient Chinese practice of piercing parts of the body with needles in an effort to treat disease and relieve pain is called what?
		A:	Acupuncture
		S:	Newhor(3)
C4	4)	Q:	What is the evolutionary advantage to wide-set eyes?
		A:	Allows the horse to see predators approaching from either side without
			turning its head
		S:	AYHC 1st(1220-1)
C1	5)	Q:	Which conformational defect often leads to splints?
		A:	Bench knees / offset knees
		S:	Kainer(39)
C2	6)	Q:	Name the type of hay most commonly used in cubed forages.

- C3 7) Q: What term describes a horse that is weak in its coupling and shallow in its flanks?
  - A: Hound-gutted or wasp-waisted
  - **S:** Evans 2nd(152)
- C4 8) Q: What is the difference between genotype and phenotype.
  - **A:** Genotype genetic make-up. Phenotype outward or physical appearance
  - **S:** Evans 2nd(454 & 458)
- C1 9) Q: What are two opposite malformations of the jaw?
  - **A:** Parrot mouthed and monkey mouthed.
  - **S:** Evans 2nd(93)
- C2 10) Q: The Thoroughbred horse was developed largely from what other breed?
  - A: Arabian
  - **S:** Evans 2nd(17)
- C3 11) Q: What are the two (2) definitions of a "paddock?"
  - **A:** A small, fenced area used for exercise or the area where racehorses are saddled and viewed before a race
  - **S:** Lewis 2nd(398)
- C4 12) Q: What are the two types of vision a horse has?
  - A: monocular and binocular
  - **S:** AYHC 1st(1220-1)

#### **BEGIN TOSS UP QUESTIONS**

- 13) Q: In miles, what is the distance of an 8 furlong race?
  - **A:** One mile
  - **S:** Newhor(116)
- 14) Q: How many beats are in a Running Walk?
  - A: Four
  - **S:** Griffiths(81)

- 15) Q: Briefly describe the action of a horse that jibs.
  - **A:** A horse that refuses to pass a certain point or object. He may refuse to go farther or may back away.
  - **S:** Newhor(157)

#### **BONUS QUESTION**

- 16) Q: The term Overo includes three coat patterns. Name them.
  - A: Frame; sabino; splashed white
  - **S:** Griffiths(48)
- 17) Q: In reference to horse breeding, what do the intitials AI stand for?
  - A: Artificial Insemination
  - **S:** Newhor(5)
- 18) Q: Hotblooded horses descended from what breed?
  - A: Arabian
  - S: Griffiths(25)
- 19) Q: What is a bony enlargement that appears on the inside and front of the hock at the point where the base of the hock tapers into the cannon bone?
  - **A:** Bone or jack spavin
  - **S:** AYHC 1st(230-4)

#### TOSS UP WITH A BONUS ATTACHED

- 20) Q: What is the term for a ration that provides a horse with the proper proportions and amounts of all the required nutrients for a 24 hour period?
  - A: Balanced ration
  - **S:** Evans 2nd(217)

#### **BONUS QUESTION**

- 21) Q: Give three functions of the hoof.
  - **A:** Support weight, resist wear, replenish itself, absorb shock, provide traction, conduct moisture, assist in pumping blood.
  - **S:** AYHC 1st(505-1)
- 22) Q: What is the name of a groom or exercise boy who walks a horse after a race or workout?
  - A: Hot Walker
  - **S:** Newhor(114)
- 23) Q: What is the small snaffle bit found in a weymouth bridle?
  - A: Bridoon
  - **S:** Newhor(39)
- 24) Q: Give a common use for a mesh sheet.
  - A: Cooling down after a workout or keeping flies away
  - **S:** AYHC 1st(1100-16)

#### TOSS UP WITH A BONUS ATTACHED

- 25) Q: What is the common name for leg edema?
  - A: Stocked Up
  - **S:** Evans 2nd(113)

- 26) Q: Name the three foundation sires of the Thoroughbred.
  - A: Byerly Turk, Godolphin Arabian (or Barb), Darley Arabian
  - **S:** Evans 2nd(21)
- 27) Q: Referring to the Triple Crown Races, where does the Preakness fall in the chronological order?
  - A: Second
  - **S:** Newhor(219)

How many pairs of ribs does the horse have? 28) Q: 18 pair (8 true - 10 false) A: S: Evans 2nd(97) 29) Q: Death of a horse can result from ingestion of what insect that is sometimes found in alfalfa hay? A: Blister Beetle S: Lewis 2nd(364) 30) What part of the female reproductive system houses the foal during Q: gestation? A: Uterus S: Evans 2nd(340) 31) Q: Parasites that attack the skin and body openings of the host animal are called what? **A:** External parasites or Ectoparasites Evans 2nd(617) S:

The Connemara is famed for what ability?

**END OF ROUND 2** 

32) Q:

A:

S:

Jumping

Evans 2nd(65)

# 2017 NC State Horse Bowl Contest Senior Division Round 3

## **BEGIN ONE-ON-ONE QUESTIONS**

C1	1)	Q:	Why should adhesive elastic materials, such as Vetwrap, never be directly
			applied to the skin or a wound?

**A:** They can cut off the blood supply

**S:** AYHC 1st(1160-1)

C2 2) Q: What small, insect-like parasite attacks both plants and animals? It causes severe itching by burrowing into the skin, or biting and sucking blood.

A: Mites

**S:** Newhor(181)

C3 3) Q: It is January and you are looking at a new boarding facility for your horse.

It is clean, warm, and comfortable in the barn. What might be the problem with this barn if you see condensation dripping from parts of the ceiling and there is a significant ammonia odor?

A: Poor Ventilation

**S:** Lewis 2nd(183)

C4 4) Q: What is the common term for dominance hierarchy?

A: Pecking order

**S:** Evans 2nd(677)

C1 5) Q: Odd-toed, nonruminating, hoofed animals, including the horse, belong to what order?

A: Perissodactyla

**S:** Evans 2nd(15)

- C2 6) Q: Give another name for offset knees.
  - A: Bench Knees
  - **S:** AYHCYL(F229-1L)
- C3 7) Q: What is a plant or animal living in, on, or with another living organism (its host), at whose expense it obtains food and shelter?
  - A: Parasite
  - **S:** Griffiths(56)
- C4 8) Q: Another name for the sense of smell is what?
  - A: olfactory sense
  - **S:** Griffiths(61)
- C1 9) Q: Wolf teeth are small teeth typically found in the interdental space. They are rarely present in which jaw of the horse?
  - A: Lower jaw or mandible
  - **S:** AYHC 1st(405-1)
- C2 10) Q: Long eyelashes are an evolutionary characteristic of the Arabian which developed for what reason?
  - **A:** The Arabian originated in the desert, thus, long eyelashes were needed to help keep sand out of their eyes.
  - **S:** AYHC 1st(150-1)
- C3 11) Q: Horses with heat stroke must immediately receive first aid treatment that focuses on reducing the horse's body temperature quickly. Give 1 way this can be done.
  - **A:** Hosing/wetting the horse down and scraping repeatedly; applying ice on the horse's topline and/or large veins of head, neck and legs; place horse in shade with fans or in an area with heavy air movement
  - **S:** AYHC 1st; Lewis 2nd(410-1 & 2; 210)

- C4 12) Q: What are the three natural gaits of the Tennessee Walking Horse?
  - **A:** flat foot walk, running walk and the rocking chair canter
  - **S:** AYHC 1st(110-1)

#### **BEGIN TOSS UP QUESTIONS**

- 13) Q: Usually brown or red in color, what are small flecks of color over the base coat color of an animal called?
  - A: Flea bites
  - **S:** Griffiths(39)
- 14) Q: What anatomical directional term refers to a structure located at the end of a limb?
  - A: Proximal
  - **S:** Kainer(2)

#### TOSS UP WITH A BONUS ATTACHED

- 15) Q: The major bone in the forearm which is united with the ulna in the horse is known as the what?
  - A: Radius
  - **S:** Lewis 2nd(401)

- 16) Q: Name three characteristics of animals in the class "Mammalia".
  - A: Warm blooded animals that have hair and give milk
  - **S:** Griffiths(15)
- 17) Q: The process of using irons kept in liquid nitrogen or dry ice and alcohol to place identifying marks on a horse is known as what?
  - A: Freeze Branding
  - **S:** Evans 2nd(809)

- 18) Q: 2 part question: You should evaluate your horse's body condition score on a regular basis to ensure that they are maintaining weight and proper condition. Explain what time of the year it is especially important to do this and why.
  - **A:** Winter- because extra energy is used to maintain body temperature and the winter hair coat makes visual observation more difficult.
  - **S:** AYHC 1st(780-2)
- 19) Q: Describe the difference in the hoof of the hindfoot and the hoof of the forefoot of the horse.
  - **A:** The hoof of the hindfoot is narrower and more pointed than the hoof of the forefoot
  - **S:** Kainer(24)

- 20) Q: The last ten pairs of ribs that are not connected to the sternum are known as what?
  - A: False or floating ribs
  - S: Newhor; Kainer(104; 8)

- 21) Q: Name three items that are important to consider when selecting a vehicle to pull a horse trailer.
  - **A:** Truck size, engine size, brake system, electrical system, type of hitch, correct hitch ball size.
  - **S:** AYHC 1st(1155-1)
- 22) Q: What sort of action may cause galls to form?
  - **A:** Rubbing of a saddle or harness
  - **S:** Newhor(117)
- 23) Q: What is the average speed for the canter?
  - A: About 12 mph
  - **S:** Griffiths(74)

- 24) Q: Describe what happens to the protein and fiber content of forages as they mature.
  - **A:** Protein decreases and Fiber increases as the plant matures
  - **S:** AYHC 1st(740-7)

- 25) Q: What is the risk of supplementing your horse's ration with various products that claim to have beneficial effects?
  - **A:** It is easy to create imbalances of minerals by over-supplementing minerals
  - **S:** AYHC 1st(725-1)

- 26) Q: Name the three Paso Fino gaits and translate what each name means.
  - A: Paso Fino (fine walk), Paso Corto (short walk), Paso Largo (long walk)
  - **S:** Griffiths(82)
- 27) Q: What type of internal parasite primarily affects foals and young horses?
  - **A:** Ascarids or Parascaris Equorum or Roundworms
  - **S:** AYHC 1st(430-1)
- 28) Q: A symptom is subjective and can not be measured. If a horse is described as lethargic, how is it behaving?
  - A: Sluggishness, sleepiness, indifference, or weakness
  - **S:** Newhor(167)
- 29) Q: Examination of an animal's body after death is called what?
  - A: Necropsy
  - **S:** Newhor(189)
- 30) Q: What are the two basic types of genetic action?
  - A: qualitative and quantitative
  - **S:** AYHC 1st(1020-2)

- 31) Q: Give another common name for Large Strongyles.
  - A: Blood Worms
  - **S:** Lewis 2nd(154)
- 32) Q: Most foundation Quarter Horses trace back to what Thoroughbred, who was imported to Virginia in 1752?
  - **A:** Janus
  - **S:** Newhor(157)

## **END OF ROUND 3**

# 2017 NC State Horse Bowl Contest Senior Division Round 4

# **BEGIN ONE-ON-ONE QUESTIONS**

**S:** AYHC 1st(605-3)

<b>C1</b>	1)	Q:	Name the tool used by farriers to open the nail holes on a horseshoe to receive the horseshoeing nail.
		A:	Pritchel
		S:	AYHC 1st(530-4)
C2	2)	Q:	What is considered the partner mineral to phosphorus?
		A:	Calcium
		S:	Griffiths(132)
С3	3)	Q:	What does it mean when a horse has the abbreviation "imp" on their U.S certificatate of registration?
		A:	They were imported from another country
		S:	Newhor(150)
C4	4)	Q:	What set of teeth in the horse are present only in the permanent dentition?
		A:	The molars (the last 3 cheek teeth)
		S:	AYHC 1st(405-1)
<b>C1</b>	5)	Q:	What can a stronger than normal pulse in the digital arteries indicate?
	•	A:	Inflammation is present in the hoof
		S:	AYHC 1st(505-5)
C2	6)	Q:	What type of vaccinations stimulate a rapid secondary antibody response and are recommended for horses that have not developed clinical signs
			-
		۸.	but are exposed to an epidemic situation?
		A:	Booster vaccines

- C3 7) What is the most noticed benefit of feeding supplements which contain Q: high levels of omega-3 fatty acids? Enhanced coat, skin and hooves A: S: AYHC 1st(742-4) 8) C4 Q: What do you call the fecal matter that accumulates in the foal's rectum during gestation? A: Meconium S: AYHCYL(112-3) **C1** 9) Q: Name two vices that are the result of boredom in confined horses. A: Wood chewing, pawing, weaving, cribbing, stall walking, pacing, stall kicking S: AYHCYL; Lewis 2nd(320-1; 370-371) C2 10) Q: What is the difference between the burro and donkey? Burro - a small feral ass; Donkey - a small domesticated ass S: Evans 2nd(76) **C3** Q: What organ functions as a blood filtering system and is responsible for the 11) excretion of waste products? A: The kidneys S: Evans 2nd(118) C4 12) Q: Name the muscle directly under the skin which allows the horse to shake off a fly that lands on the skin.
- **BEGIN TOSS UP QUESTIONS**

A:

S:

- 13) Q: What is the heaviest and strongest bone in the horse's body? It is situated in the hind end.
  - A: Femur
  - **S:** Evans 2nd(687)

Panniculus muscle

Evans 2nd(120)

- 14) Q: What part of a horse's eye is defined as a slit in the eye to allow light in?
  - A: Pupil
  - **S:** Griffiths(56)

- 15) Q: What specific type of dietary requirement does a horse need if they suffer from HYPP?
  - **A:** A diet low in potassium
  - **S:** Griffiths(136)

#### **BONUS QUESTION**

- 16) Q: Name five coat colors that are a result of dilution genes.
  - **A:** Palomino, buckskin, crème, perlino, dun, champagne, silver dapple
  - **S:** Griffiths(95)
- 17) Q: What is the name of the condition that results when animals have, produce or obtain antibodies that enable them to fight off health issues?
  - A: Immunity
  - **S:** Griffiths(169)
- 18) Q: Apocrine tubular glands are more commonly known as what?
  - **A:** Sweat glands
  - **S:** Kainer(5)
- 19) Q: Infection of the cranial nuchal bursa is commonly referred to as what?
  - **A:** Poll evil
  - **S:** Kainer(20)

#### TOSS UP WITH A BONUS ATTACHED

- 20) Q: A hay belly may be an indication of an excess of what nutrient in the horse's diet?
  - A: Fiber
  - **S:** Lewis 2nd(4)

#### **BONUS QUESTION**

- 21) Q: Navicular disease is a progressive, degenerative condition involving three (3) structures within the foot. Name them.
  - A: Navicular bone, navicular bursa and the deep flexor tendon
  - **S:** Kainer(27)
- 22) Q: What vitamin deficiency results in rickets in the young horse and inadequate bone mineralization in the adult horse?
  - A: Vitamin D
  - **S:** Lewis 2nd(49)
- 23) Q: What is a tough, fibrous band which connects bones or supports viscera?
  - A: Ligament
  - **S:** Lewis 2nd(395)
- 24) Q: What term describes the rhythmic opening and closing of the labia? This behavior is typically shown by mares in heat.
  - A: Winking
  - **S:** Lewis 2nd(408)

#### TOSS UP WITH A BONUS ATTACHED

- 25) Q: What part of the brain controls basic body functions such as respiration, temperature, and heart rate?
  - **A:** Brain stem
  - **S:** Newhor(37)

- 26) Q: Name the three microbes that aid in fermentation in the cecum.
  - **A:** Bacteria, protozoa and fungi.
  - S: Griffiths(112)

27) Q: What term describes a horse trained to mount from the off side? A: Indian Broke S: Newhor(151) 28) Q: Which English breed of horse most likely descended from the chargers used in the Middle Ages for jousts? A: Shire Newhor(243) S: 29) The horse is an obligate nasal breather. What does this mean? Q: The horse is unable to breathe through the mouth (has to breathe through A: the nose) S: AYHC 1st(705-1) This breed, developed in the US, has been called the "Peacock of the 30) Q: Horse World." American Saddlebred A: S: Evans 2nd(38) 31) Q: The mating of a chestnut with a cremello should produce all offspring of what color? A: Palomino Evans 2nd(67) S: 32) Q: Contraction of the intercostal and abdominal muscles, along with the diaphragm, results in what?

**END OF ROUND 4** 

A:

S:

Respiration or breathing

Evans 2nd(108)

# **2017 NC State Horse Bowl Contest Senior Division Round 5**

# **BEGIN ONE-ON-ONE QUESTIONS**

<b>C1</b>	1)	Q:	Give one (1) example of a common feedstuff that is high in potassium?
		A:	Legume hay (alfalfa), molasses, beet pulp
		S:	AYHC 1st(795-4)
C2	2)	Q:	Hanoverians, Holsteiners, and Trakehners are all breeds from what
			country?
		A:	Germany
		S:	Evans 2nd(74)
C3	3)	Q:	The Strangles infection is caused by what specific bacteria?
		A:	Streptococcus Equi
		S:	Evans 2nd(596)
C4	4)	Q:	Tearing of the suspensory ligament at the point of insertion to the
			sesamoid bones causes inflamation on the bone surface. This
			inflammation is known as what?
		A:	Sesamoiditis
		S:	Evans 2nd(161)
C1	5)	Q:	What part of the mare's reproductive tract acts as a physical barrier
			between the vagina and the uterus?
		A:	Cervix
		S:	AYHC 1st(910-1)
C2	6)	Q:	What is the name of the large muscle in the lower jaw that raises the ja
			during chewing?
		A:	Masseter muscle
		S:	Newhor(176)

- C3 7) Q: The disturbance of the interosseous ligaments prior to their ossification can lead to what?
  - A: Splints
  - **S:** Evans 2nd(685)
- C4 8) Q: Several different poisonous plants contain neurotoxins which impact the nervous system of the horse. What function of the horse can be completely lost by the prolonged ingestion of a neurotoxin found in either Yellowstar Thistle or Russian Knapweed?
  - A: The horse's ability to take in (ingest) and masticate food
  - **S:** Lewis 2nd(318)
- C1 9) Q: The carpus consists of how many and what type of bones?
  - **A:** 8 short bones
  - **S:** Evans 2nd(97)
- C2 10) Q: "Big Head" Disease is caused by what 2 nutrient imbalances?
  - A: Excessive phosphorus and low calcium
  - **S:** Evans 2nd(228)
- C3 11) Q: Name two kinds of bar shoes.
  - **A:** Egg Bar and Heart Bar
  - **S:** AYHC 1st(515-2)
- C4 12) Q: All vertebrae contain a passage or foramen that allows the spinal cord to pass through. What is the name of this foramen?
  - **A:** The vertebral foramen
  - **S:** Kainer(7)

#### **BEGIN TOSS UP QUESTIONS**

- 13) Q: Damage to the recurrent laryngeal nerve results in lack of muscular control of the vocal cords and is commonly referred to as what?
  - **A:** Roaring (Laryngeal Hemiplegia)
  - **S:** Evans 2nd(568)
- 14) Q: Approximately ninety-nine (99) percent of all Standardbreds trace to what singular ancestor?
  - **A:** Hambletonian 10
  - **S:** Evans 2nd(29)

#### TOSS UP WITH A BONUS ATTACHED

- 15) Q: Agalactia is when the mare is <u>unable</u> to produce milk. Give a nutritional reason for why this may occur.
  - **A:** Grazing on fescue pasture during pregnancy
  - **S:** Newhor(4)

- 16) Q: The Exmoor Pony developed several unique characteristics in order to survive their cold, wet and windy climate. Name 3.
  - A: Modest height of 12.2hh (limited forage); wide muzzle (maximize food intake per bite); large molars (facilitate grinding of coarse grasses); wide forehead with prominent eyes (wider range of vision for prey animal) & fleshy upper and lower eyelids known a
  - **S:** AYHC 1st(157B-1)
- 17) Q: Wood board fences are traditional for horses. They are rugged, safe and easily seen. However, there has been an increase in the use if newer types of fences over wood. What are two (2) financial reasons for this?
  - **A:** Expensive to build and expensive to maintain.
  - **S:** Evans 2nd(761)

- 18) Q: 2 part question: Give two examples of ectoparasites and what describe what they have in common.
  - **A:** Lice, Fleas, or Mites. They all live on the skin's surface.
  - **S:** Newhor(88)
- 19) Q: What is a bolus?
  - **A:** A round mass of food or medicine given orally
  - **S:** Newhor(34)

- 20) Q: Black Walnut shavings are poisonous and should not be used in your horse's stall. What color are these shavings?
  - **A:** Purplish-black to coffee-brown; accept anything close to these colors
  - **S:** Lewis 2nd(322)

- 21) Q: Name 3 types of equine mortality insurance that are available for horse owners.
  - **A:** Major Medical; Loss of Use; Surgical-Only; Limited Mortality/Specific Perils; Stallion & Mare infertility; Prospective Foal; Equine-related Property; Frozen stored semen; Tack, equipment and personal property insurance
  - **S:** AYHC 1st(1340-1)
- 22) Q: What is the study of hormones and their effects called?
  - **A:** Endocrinology
  - **S:** AYHC 1st(920-5)
- 23) Q: Horses that are poisoned by something with no specific treatment are usually given activated charcoal and a saline laxative via stomach tube. What is the reason for giving these medications?
  - **A:** To prevent further absorption of the toxin in the gastrointestinal tract (the activated charcoal binds with the toxin and the saline laxative speeds passage of any toxins through the diestive tract)
  - **S:** Lewis 2nd(339)

- 24) Q: This gene regulates the color distribution of eumelanin and pheomelanin to the skin and hair.
  - A: Extension Gene
  - **S:** Griffiths(94)

- 25) Q: Ingesting sweet clover containing mycotoxins that cause dicoumarol poisoning often results in a blood clotting problem. This is due to a deficiency of what vitamin?
  - A: Vitamin K
  - **S:** Lewis 2nd(348)

- 26) Q: In reference to Navicular disease there are several conditions that are thought to aggravate the condition; name 3 of them
  - **A:** Upright conformation, small feet, improper shoeing, exercise on hard ground, demanding work
  - **S:** Kainer(27)
- 27) Q: Increasing periods of daylight stimulate what part of the the brain to secrete GnRH (Gonadotropin Releasing Hormone)?
  - **A:** Hypothalamus
  - **S:** Kainer(71)
- 28) Q: The coat color of Exmoor Ponies will only be in varying shades of what color?
  - A: Brown
  - **S:** AYHC 1st(169-1)
- 29) Q: Who is the foundation sire of the American Saddlebred?
  - **A:** Denmark
  - **S:** Evans 2nd(38)

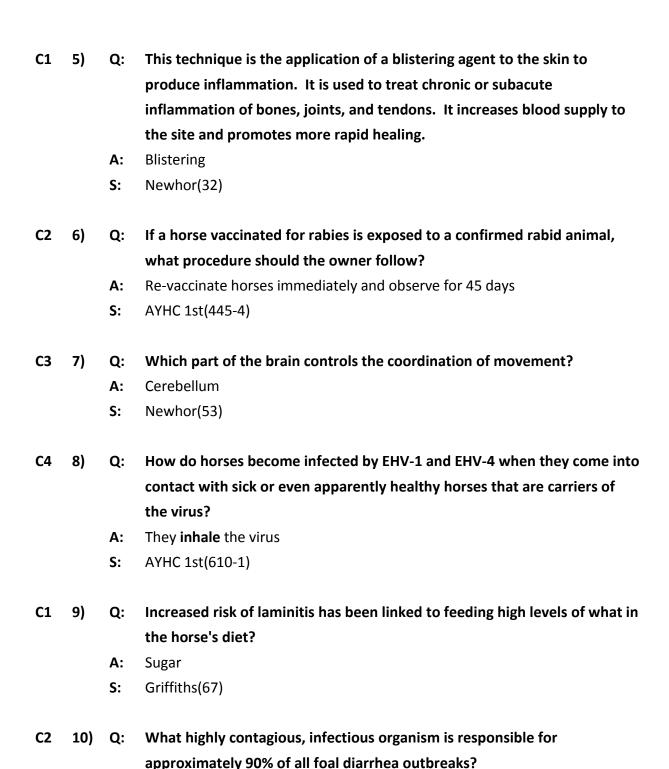
- 30) Q: This type of horse shoe is used to transfer weight from the wall to the frog while the wall of the hoof is healing?
  - **A:** Heart bar shoe
  - **S:** AYHCYL(231-3)
- 31) Q: Two part question: what is the function of having the inside rim on the web of a horse show raised above the outside? In what riding disciplines would you see these types of shoes?
  - **A:** This shape increases traction, prevents sliding, and enables the foot to roll over faster. Polo and western barrel-racing.
  - **S:** Evans 2nd(737)
- 32) Q: Describe two conditions in the horse that are referred to as windsucking.
  - **A:** A harmful habit in which a horse draws in and swallows air, causing indigestion. When a mare aspirates air and fecal matter into the vagina
  - **S:** Newhor; Lewis 2nd(294; 408)

**END OF ROUND 5** 

# 2017 NC State Horse Bowl Contest Senior Division Round 6

## **BEGIN ONE-ON-ONE QUESTIONS**

- C1 1) Q: What mosquito-borne virus was first detected in the United States in August of 1999?
  - A: West Nile
  - **S:** AYHC 1st(665-1)
- C2 2) Q: What is the key source of hormones used in the world's leading estrogen replacement therapy for humans that is used to treat osteoporosis and to relieve short-term symptoms of menopause?
  - **A:** Pregnant mare's urine
  - **S:** AYHC 1st(175-1)
- C3 3) Q: When using the "system for scoring of behavioral estrus in mares," what behavior is seen in a mare scoring a 1?
  - **A:** Mare is not aggressive towards the stallion, but looks away or is uninterested
  - **S:** AYHC 1st(940-2)
- C4 4) Q: Carbohydrates are a major source of energy for horses. Dietary sugars are one form of carbohydrates which can be broken down into simple sugars and complex sugars. What are the scientific terms to describe simple and complex sugars?
  - **A:** Simple sugars: monosaccharides. Complex sugars: polysaccharides
  - **S:** Griffiths(145)



A:

S:

Rotavirus

AYHC 1st(950-7)

- C3 11) Q: The proper ratio of calcium to phosphorous in the diet is 1:1-6:1. Why is it important that the ratio is not inverted such that phosphorus is higher than calcium?
  - A: Calcium absorption may be impaired and skeletal abnormalties may occur
  - **S:** AYHC 1st(750-2)
- C4 12) Q: Rotational grazing allows for the greatest benefit from available pastures.

  After allowing horses to graze on a pasture for 10-14 days. How long should that pasture be allowed to rest for new forage growth to occur?
  - A: The pasture should be allowed to rest for one month
  - **S:** Lewis 2nd(105)

#### **BEGIN TOSS UP QUESTIONS**

- 13) Q: Name this disease: the horse experiences muscle-cell necrosis which causes destruction of the muscle tissue. Blood may be seen in the urine and the disease usually occurs in draft breeds.
  - A: Rhabdomyolysis (also accept tying-up, Monday-morning disease, azoturia)
  - **S:** Griffiths(100)
- 14) Q: Equine Hyperelastosis Cutis primarily affects which breed of horse?
  - **A:** Quarter Horses
  - **S:** AYHC 1st(675-1)

#### TOSS UP WITH A BONUS ATTACHED

- 15) Q: Numerous studies have been done to determine the major factors contributing to Developmental Orthopedic Disease in horses. As the results of these studies, what was determined as the primary cause of DOD?
  - A: Rapid Growth
  - **S:** Lewis 2nd(283)

#### **BONUS QUESTION**

- 16) Q: There are at least 8 white spotting patterns typically seen in the Appaloosa or Pony of the America's breeds. Name 4 of the spotting patterns.
  - **A:** Mottled, frost, snowflake, varnish roan, speckled, blanket, leopard, few-spot leopard
  - S: Griffiths(51)
- 17) Q: As it refers to shoulder and arm muscle movements, what is the difference between adduction and abduction?
  - **A:** Adduction is movement toward the median plane and Abduction is movement away from the median plane
  - **S:** Kainer(18)
- 18) Q: A large infestation of bots can cause paralysis of what anatomical structure?
  - A: Esophagus
  - **S:** AYHC 1st(415-5)
- 19) Q: For horses, energy is measured in kilocalories and megacalories; how many calories are in one megacalorie?
  - **A:** 1,000,000 calories
  - **S:** AYHC 1st(715-3)

#### TOSS UP WITH A BONUS ATTACHED

- 20) Q: What structure of the eye is believed to serve as a "visor" to deflect sunlight while horses are grazing?
  - A: Corpora nigra
  - **S:** AYHC 1st(465-1)

- 21) Q: What are the 3 most important species of strongyles to control?
  - **A:** Strongylus vulgaris, Strongylus edentatus, Strongylus equinus.
  - **S:** Evans 2nd(622)

- 22) Q: Wobbler syndrome is most prevalent in the Quarter Horse and Thoroughbred. What is the most common cause of Wobbler syndrome?
  - **A:** Malformation of the cervical vertebrae
  - **S:** Kainer(plate 8)
- 23) Q: 2 part question: What is the largest salivary gland and where is it located?
  - **A:** Parotid: under the ear.
  - **S:** Evans 2nd(197)
- 24) Q: Some amino acids can be synthesized into different amino acids when the body needs them. The amino acids that can NOT be synthesized in sufficient amounts are known as what?
  - A: Essential Amino Acids
  - **S:** Griffiths(118)

- 25) Q: What condition causes founder in a mare, but never in a gelding or stallion?
  - A: Retained placenta / afterbirth / hormonal difficulties.
  - **S:** Evans 2nd(423)

- 26) Q: Describe the difference between a sign and a symptom of disease and give an example of each.
  - A: A sign is an objective, measurable evidence of a health issue (ex. temperature, pulse, respiration). A symptom is subjective evidence of a health issue as perceived by an observer (ex. lack of appetite, lessened activity level, pacing in circles)
  - S: Griffiths(166)

- 27) Q: What is the technical name for the enlarged follicle that bulges from the ovary just prior to ovulation?
  - A: Graafian follicle
  - **S:** AYHC 1st(920-4)
- 28) Q: The word "manus" is Latin for "hand." Where would you find the manus on a horse?
  - A: The portion of the leg from the carpus (knee) to the ground
  - S: Kainer(1)
- 29) Q: This is a condition usually seen in newborn foals 2-5 days after birth. It is an incompatibility of the mare's and foal's blood types causing destruction of red blood cells in the newborn foal.
  - A: Neonatal Isoerythrolosis
  - **S:** Griffiths(102)
- 30) Q: During the winter months, people tend to ride their horses less. This reduces circulation to all the muscles of the horse, including the smooth muscles of the intestines. What problem can result from this?
  - **A:** Impaction colic
  - **S:** AYHC 1st(420-3)
- 31) Q: The molds penicillium, aspergillus, and fusarium are responsible for most mycotoxin production. They are found sproadically in harvested and unharvested feeds. What is the most significant environmental factor affecting mold growth and mycotoxin production
  - A: Moisture
  - **S:** Lewis 2nd(347)
- 32) Q: What are osteoblasts responsible for?
  - **A:** Forming bones
  - **S:** Evans 2nd(237)

# 2017 NC State Horse Bowl Contest Senior Division Round 7

#### **BEGIN ONE-ON-ONE QUESTIONS**

<b>C1</b>	1)	Q:	One of the most common complications of strangles is known as bastard
			strangles. Describe this condition.
		A:	The infection is disseminated to other lymph node sites in the horse's body,
			such as abdomen, brain, liver, kidneys or lungs
		S:	AYHC 1st(445-13)

- C2 2) Q: 2 part question: hydrochloric acid is screted from what organ and for what reason?
  - **A:** Secreted by the stomach and to activate pepsin and break down protein.
  - **S:** Newhor(145-146)
- C3 3) Q: Large numbers of what parasite can interfere with the function of the ileocecal valve, which is the junction of the small and large intestine?
  - **A:** Tapeworm
  - **S:** AYHC 1st(430-4)
- C4 4) Q: Parrot mouth is the condition when the upper incisors extend out farther than the lower incisors. What is the scientific name for this condition?
  - A: Brachynathia
  - **S:** Newhor(36)
- C1 5) Q: The plane that divides a horse's body into two equal halves is know as the median plane. What would you call any plane parallel to the median plane?
  - A: Saggital
  - **S:** Kainer(3)

C2	6)	Q:	This organization is dedicated to the promotion of the reining horse. Its
			initials are NRHA.
		A:	National Reining Horse Association
		S:	Newhor(187)
С3	7)	Q:	The organism fusobacterium necrophorum is frequently associated with
		۸.	condition in the horse?
		A:	Thrush
		S:	Kainer(24)
<b>C4</b>	8)	Q:	What does the term owl-headed describe?
		A:	A horse that is difficult to train
		S:	Newhor(199)
<b>C1</b>	9)	Q:	Energy not needed by the body at the time of digestion is stored as what?
		A:	Glycogen
		S:	Griffiths(146)
C2	10)	Q:	What breed of the United States is 15-16 hands, strong, well built, docile,
			and comfortable with a four-beat running walk?
		A:	Tennessee Walking Horse
		S:	Newhor(265)
C3	11)	Q:	What term describes the yellow-brown, disc-like structure found in the
			placental fluids after parturition?
		A:	Hippomane
		S:	Evans 2nd(342)
C4	12)	Q:	In the integumentary system, the sebaceous gland produces what
			substance?
		A:	Oil
		S:	Griffiths(214)

- 13) Q: 2 part question: how is a compression bandage applied and what is it's purpose?
  - **A:** The compression bandage is applied tightly over an inflammed area or laceration to provide pressure to the area and reduce swelling.
  - **S:** Newhor(63)
- 14) Q: What causes the white markings that form from scar tissue on the horse?
  - A: Melanocyte cells that have been destroyed
  - **S:** Griffiths(97)

- 15) Q: The bark and leaves of a Choke Cherry tree contain what poison that results in difficulty breathing and possibly death?
  - A: Cyanide
  - **S:** Newhor(56)

- 16) Q: Normal equine urine ranges in color from pale to reddish yellow.

  Abnormal coloring can indicate a vast array of health problems. Explain what the following 3 colors of urine could indicate: Red, Brownish-green and dark brown/coffee-colored.
  - **A:** Red=bleeding in the urinary tract; Brownish-green=jaundice & liver problems; Dark brown/coffee colored=azoturia
  - **S:** AYHC 1st(425-2)
- 17) Q: Meiosis occurs only in reproductive cells. Name the two organs where this type of cell division occurs.
  - **A:** Ovaries of the mare and Testes of the stallion
  - S: Griffiths(88)
- 18) Q: What is the name of the innermost layer of the uterus?
  - A: Endometrium
  - **S:** AYHC 1st(910-3)

- 19) Q: If a disease is classified as an arbovirus, in what way is it transmitted?
  - **A:** Bloodsucking insects, such as mosquitoes
  - **S:** AYHC 1st(445-4)

- 20) Q: Vitamin B12 is unique among vitamins in that it is synthesized in nature only by microorganisms. In what part of the horses digestive tract is it synthesized and possibly absorbed?
  - **A:** The horse's colon
  - **S:** Lewis 2nd(57)

- 21) Q: Name 5 natural environmental factors to consider when selecting a location for a horse farm.
  - **A:** Topography, drainage, prevailing winds, solar radiation, precipitation, vegetation, soil characteristics
  - **S:** AYHC 1st(310-1)
- 22) Q: The period of rapid follicular growth in the estrous cycle just prior to heat or estrus is known as what?
  - **A:** Proestrus
  - **S:** Newhor(220)
- 23) Q: Lengthening the stride yet maintaining rhythm is known as what?
  - A: Extension
  - **S:** Newhor(101)
- 24) Q: There are two types of skin glands that empty into hair follicles. Name them.
  - A: Sebaceous (oil) glands and apocrine (sweat) tubular glands
  - **S:** Kainer(35)

- 25) Q: Which English class requires jumping two fences and then showing on the rail at a walk, trot, canter, and hand gallop?
  - A: Hunter Hack
  - **S:** Newhor(145)

- 26) Q: The Oldenburg breed originated in West Germany and is typically a well rounded saddle horse. What three breeds were influential in the development of the Oldenburg?
  - A: Fresian, Anglo-Arab, and Throroughred
  - **S:** Newhor(195)
- 27) Q: What are the 3 phases in eventing?
  - A: Dressage, cross country and stadium jumping
  - **S:** Newhor(100)
- 28) Q: Explain what a muscle tremor is.
  - **A:** An involuntary trembling or quivering of a muscle
  - **S:** Newhor(184)
- 29) Q: What are the tiny, fingerlike extensions of the intestine that are designed to increase the surface area called?
  - A: Villi
  - **S:** Newhor(283)
- 30) Q: What is a breed that has a mane and tail that falls out during the summer and grows back each winter?
  - A: American Bashkir Curly
  - **S:** Newhor(8)

- 31) Q: What is the name of a bit that has 3 rings; 2 are for the cheek pieces and one for the lead rein?
  - **A:** Chifney or anti-rearing bit
  - S: Newhor(13)
- 32) Q: What is a blood filled sac formed by an abnormal dilation of the wall of an artery, a vein, or in the heart?
  - **A:** Aneurysm
  - S: Newhor(11)

## **END OF ROUND 7**

# 2017 NC State Horse Bowl Contest Senior Division Round 8

## **BEGIN ONE-ON-ONE QUESTIONS**

<b>C1</b>	1)	Q:	What does the term "wry tail" mean?
		A:	A tail that is carried to one side rather than being held straight
		S:	Newhor(295)
C2	2)	Q:	Death from ingestion of Yellow Star Thistle is primarily due to loss of what
			physiological function?
		A:	Loss of ability to ingest or chew food
		S:	Lewis 2nd(318)
С3	3)	Q:	Why does high protein consumption require more water consumption?
		A:	So the horse can produce more urine to excrete the excess nitrogen.
		S:	Lewis 2nd(4)
C4	4)	Q:	What is the purpose of the scroll-shaped turbinate bones?
		A:	To deflect and warm the inspired air.
		S:	Evans 2nd(90)
<b>C</b> 1	5)	Q:	What is the name of the type of plant that works with bacteria so it can
			use air and soil nitrogen for the production of plant proteins?
		A:	Legume
		S:	Lewis 2nd(108)
C2	6)	Q:	Infection of the supraspinous bursa is know as what?
		A:	Fistulous withers
		S:	Kainer(20)

C3 7) Q: Name the bones of the foot from proximal to distal.

A: Long pastern, short pastern, coffin/pedal bone
Or, 1st,2nd,3rd phalanx

Or, p1,p2,p3

**S:** Griffiths(200, 203)

C4 8) Q: Sweeny is caused by damage to what nerve in the shoulder?

A: Suprascapular

**S:** Kainer(22)

C1 9) Q: Name the genetic disease that is a fatal disorder of Belgian horses and related European breeds. It results in foals with skin and mouth lesions that are present at birth or that develop within the first few days of life.

**A:** JEB (Junctional Epydermolysis Bulosa)

**S:** AYHC 1st(1095-2)

C2 10) Q: What is hematuria?

**A:** Blood in the urine

**S:** Newhor(136)

C3 11) Q: Describe what the phrase "gone to ground" means in regards to fox hunting.

**A:** When the fox take refuge in an earth, drain, or other shelter

**S:** Newhor(122)

C4 12) Q: What is the incubation period of equine distemper, in days?

**A:** 3-6 days

**S:** Griffiths(171)

## **BEGIN TOSS UP QUESTIONS**

13) Q: What two (2) states have implemented measures to control the spread of Equine Viral Arteritis in their Thoroughbred breeding populations?

**A:** Kentucky and New York

**S:** AYHC 1st(620-3)

- 14) Q: An exhausted, overtaxed horse may lose control over diaphragm contraction and may suffer from what debilitating condition?
  - A: Thumps or synchronous diaphragmatic flutter
  - **S:** Evans 2nd(110)

- 15) Q: What is the name of the pericardium that covers the heart?
  - **A:** Visceral pericardium or epicardium
  - **S:** Kainer(56)

- 16) Q: There are four (4) B vitamins that do not have numbers assigned to them.

  Name them.
  - A: Biotin, Folic Acid, Niacin, Pantothenic Acid
  - S: Griffiths(128)
- 17) Q: In reference to horse racing, "exacta" & "perfecta" are both types of wagering in which a bettor selects the 1st & 2nd place finishers in a race. What is the difference in how the horses must finish to collect money on these 2 types of wagers?
  - A: Exacta-horses must finish in "exact" order selected; Perfecta-horses must finish in 1st or 2nd place w/o regard to actual order in which they pass the post
  - **S:** Newhor(100, 208)
- 18) Q: Why would the urine of a horse fed legume hay smell stronger than the urine of a horse fed grass hay?
  - **A:** Because legume hay has a higher protein content, therefore producing a greater amount of ammonia to be excreted
  - **S:** Evans 2nd(256)

- 19) Q: What mineral keeps bone & blood vessels elastic?
  - A: Copper
  - **S:** Lewis 2nd(35)

- 20) Q: If a horse exhibits risus sardonicus or a sardonic smile, from what disease are they suffering?
  - **A:** Lockjaw or tetanus
  - **S:** AYHC 1st(445-3)

- 21) Q: Explain the difference between red marrow and yellow marrow and the significance of each.
  - **A:** Red marrow produces red blood cells and white blood cells and platelets which are esential for blood clotting. Yellow marrow consists of fat cells and blood cell producing units that help to regenerate new blood cells.
  - **S:** Kainer(63)
- 22) Q: 2 part question: What do the initials "HCG" stand for and what is HCG used for?
  - **A:** Human Choronic Gonadatropin; It stimulates follicles to ovulate
  - **S:** Evans 2nd(399)
- 23) Q: 2 part question: What is the "Z" gene and what effect does it have on bay horses?
  - **A:** It is responsible for the silver dapple pattern; on a bay horse, it lightens the points to create a "red silver"
  - **S:** AYHC 1st(1040-2)
- 24) Q: Fever, low activity, reluctance to move, fistulous wither, and poll evil are symptoms of which bacterial disease that is sometimes called 'undulant fever' in humans?
  - **A:** Brucellosis
  - **S:** Griffiths(170)

25) Q: What is an exotosis?

**A:** Abnormal growth of the periosteum

**S:** Evans 2nd(90)

## **BONUS QUESTION**

26) Q: What are the three layers of the uterus?

A: Perimetrium, myometrium and endometrium

**S:** AYHC 1st(920-3)

27) Q: What term refers to photosensitization that occurs on the nostrils?

A: Blue nose

**S:** Newhor(33)

28) Q: What are 2 of the 3 primary types of gene action that affect traits controlled by qualitative gene action?

A: Dominance, co-dominance, partial dominance

**S:** AYHC 1st(1020-2)

29) Q: What ligament connects the splint bone to the cannon bone?

**A:** the interosseous ligament

**S:** Newhor(154)

30) Q: What is myopathy?

**A:** A term used to describe disease of a muscle.

**S:** Evans 2nd(304)

31) Q: What is the name of a breed famous for its role in Portuguese bullfights. It is currently in declining numbers and may exhibit coat colors of gray, chestnut and brown?

A: Lusitano

**S:** Newhor(172)

32) Q: What is the primary artery of the front legs?

**A:** Median artery

S: Griffiths(208)

## **END OF ROUND 8**

## 2017 NC State Horse Bowl Contest Senior Division Round 9

## **BEGIN ONE-ON-ONE QUESTIONS**

- C1 1) Q: Jimson weed, tomato, potato, and jessamine plants are all members of what large, poisonous family of plants?
  - A: Nightshade
  - **S:** Lewis 2nd(307)
- C2 2) Q: Which parasite damages the cranial mesenteric artery?
  - A: Strongylus vulgaris
  - **S:** Evans 2nd(623)
- C3 3) Q: What specific type of internal parasite, that causes summer sores, is dependent on house flies or stable flies to complete part of its life cycle?
  - **A:** Stomach worm (Habronema)
  - **S:** Lewis 2nd(167)
- C4 4) Q: Why is chlorhexidine solution, which is used to treat the umbilical stump, safer to use than tincture of iodine?
  - **A:** Iodine solutions can cause tissue necrosis which may lead to umbilical infections
  - **S:** AYHC 1st(975-2)
- C1 5) Q: Dominance is a category of behavior that is established through aggression. What other type of behavior includes aggression and involves actions that are a result of conflict, fighting, submission and escape?
  - **A:** Agonistic
  - **S:** Evans2(677)

C2	6)	Q: A: S:	What are the 3 membranes surrounding the fetus during gestation?  Amnion, chorion, allantois  Evans2(340)
С3	7)	Q:	Inflammation of the stifle joint is called what?
		A:	Gonitis
		S:	Newhor(1900-5)
C4	8)	Q:	A "live foal" guarantee in a breeding contract indicates the foal has met what two requirements after birth?
		A:	The foal stands and nurses
		S:	Newhor(170)
<b>C1</b>	9)	Q:	The leopard spotting pattern in the Appaloosa breed is also found in what Austrian breed of horse?
		A:	Noriker
		S:	Evans 2nd(498)
C2	10)	Q:	What genetic disease results in low glucose stores and abnormal tissue metabolism which lead to foals living only up to 18 weeks of age? It is most common in Quarter horse foals.
		A:	Glycogen branching ezyme deficiency
		S:	AYHC 1st(1095-3)
C3	11)	Q:	You are an equine facility construction specialist and are preparing a site for a new barn. In regards to topography, what would be your recommendation on slope percentage to facilitate proper drainage and prevent erosion?
		A:	Slope of 2 to 6 percent
		S:	AYHC 1st(320-2)
C4	12)	Q:	What is the by-product of oil extraction from flax seeds?
		A:	Linseed meal
		S:	Lewis 2nd(85)

## **BEGIN TOSS UP QUESTIONS**

- 13) Q: What does the term teratogenic describe in regards to plant poisoning?
  - **A:** Compounds that cross the placenta and cause physical defects in the fetus
  - **S:** Lewis2(332)
- 14) Q: A stain used to microscopically distinguish between different types of bacteria is called what?
  - **A:** Gram stain
  - **S:** Newhor(123)

### TOSS UP WITH A BONUS ATTACHED

- 15) Q: What is the name of the Thoroughbred stallion whose name means to "look in opposite directions"? He was influential in the development of the Quarter Horse.
  - A: Janus
  - **S:** Evans2(23-25)

- 16) Q: Cryptorchidism is a condition in which one or both testes fail to descend completely into the scrotum. Give the names for the two types of cryptorchidism and tell whether each of the types are usually fertile or usually sterile.
  - **A:** Unilateral-Fertile, Bilateral-Sterile
  - **S:** Evans 2nd(520)
- 17) Q: What term refers to the portion of the parasite population that has not been exposed to dewormers and has not yet developed a resistance to them?
  - **A:** Refugia
  - **S:** AYHC 1st(430-8)

- 18) Q: The medication Pergoglide may resolve clinical signs of what disease for several years?
  - A: Cushing's
  - **S:** AYHC 1st(450-5)
- 19) Q: If a mare is not pregnant after estrus, what hormone is released from the uterus 14-16 days following ovulation? This hormone travels to the ovary where is causes destruction of the corpus luteum.
  - **A:** Prostaglandin F2alpha (must be specific)
  - **S:** AYHC 1st(920-6)

- 20) Q: Clostridium perfingens type D bacteria is the cause of what disease?
  - A: Enterotoxemia
  - **S:** Evans 2nd(305)

- 21) Q: Differentiate between the terms valgus and varus and give an example of each as it relates to the horse's conformation.
  - **A:** Valgus means a deviation toward the midline (such as knock-kneed). Varus mean a deviation of a joint away from the midline (such as bowlegged).
  - **S:** Lewis 2nd(408)
- 22) Q: 2 part question: There are two types of immunity in the horse. Name these 2 types and explain how horses obtain them.
  - **A:** Passive- foals obtain antibodies from the dam's milk or colostrum; Activethe body builds antibodies in response to disease or vaccination
  - **S:** Griffiths(169)
- 23) Q: A "red bag delivery" is most commonly observed in mares that have been grazed on what type of pasture?
  - **A:** Fescue
  - **S:** AYHC 1st(970-4)

- 24) Q: 2 part question: The medical stem "-oma" is Greek for growth or tumor.

  What type of growths are lipomas and carcinomas and what type of tissues do they produce?
  - A: Lipomas are benign fatty tumors and carcinomas are cancerous epithelial cells
  - **S:** Newhor(48, 169)

- 25) Q: In what disease would a horse display the "elephant-on-a-ball" posture?
  - A: Botulism
  - **S:** AYHC 1st(445-8)

- 26) Q: There are two types of dystocia: fetal and maternal. Name 4 of the 8 malpostions of fetal dystocia commonly seen in horses.
  - **A:** Flexed capri (knees), Nape, Transverse Dorsal, Transverse Ventral, Elbowlock with dogsitting position, dogsitting, wry neck (also accept flexed neck), and breech
  - **S:** Evans 2nd(424)
- 27) Q: The hormone prolactin stimulates milk formation in the alveoli of the mammary gland. Where is prolactin produced?
  - **A:** Anterior pituitary gland
  - **S:** Evans 2nd(127)
- 28) Q: What are reactive molecules that steal or share another molecule's electrons, leading to cellular destruction?
  - **A:** Free Radicals
  - **S:** Newhor(114)
- 29) Q: Name the 3 glands that are located along the urethra of the male that produce fluids to nourish and preserve the sperm.
  - **A:** Prostate, Bulbo-urethral or Cowpers, Vesicular or Seminal Vesicles
  - **S:** Evans2; Newhor(360; 2)

- 30) Q: Mammary glands are highly developed and modified forms of what kind of glands?
  - **A:** Apocrine sweat glands
  - **S:** Kainer(5)
- 31) Q: A single dilution of the bay coat color results in a buckskin. What color appears when there is a double dilution of bay?
  - A: Perlino
  - **S:** Evans2(81)
- 32) Q: Name this forage: It grows best in cool, moist climates and on heavy silt or clay soil. It is poorly palatable to horses and may cause photosensitization if grazed exclusively. Its scientific name is "Trifolium hybridum".
  - **A:** Alsike clover
  - **S:** Lewis 2nd(108)

**END OF ROUND 9** 

## **2017 NC State Horse Bowl Contest Senior Division Extra Toss Up Questions**

1) Q: What is a horse that is less than 6 months old called?

A: Foal

**Source:** AYHC 1st(110-5)

2) Q: This is the mouthpiece of the bridle used while riding or driving.

A: Bit

**Source:** AYHC 1st(110-5)

3) Q: What is the primary function of the sole?

A: Protection

**Source:** AYHC 1st(505-2)

4) Q: Where does air enter a horses respiratory system?

A: The nostrils

**Source:** AYHC 1st(810-1)

5) Q: What are the three basic types of bits?

A: Snaffle, curb, and hackamore

**Source:** AYHC 1st(1100-8)

Q: What term describes the stabilization of the joints of the fore and hind limbs by ligaments and tendons which permits the horse to stand while sleeping?

**A:** The Stay mechanism or Stay apparatus

**Source:** Kainer(21, 36)

7) Q: What is the basic unit of inheritance?

**A:** The gene

**Source:** AYHC 1st(1020-1)

8) Q: What is the only breed of horse in America to be named after an individual animal?

A: The Morgan Horse

**Source:** Evans 2nd(36)

9) Q: How many teats are on the mare's udder?

**A**: 2

Source: Evans 2nd(322)

10) Q: What are the two main functions of the equine digestive tract?

A: Digestion and absorption

**Source:** Griffiths(108)

11) Q: The sheath of the penis is known as what?

A: Prepuce

**Source:** Kainer(4)

12) Q: The Nez Perce tribe were the first to breed horses for specific traits.

Those horses became known as what breed?

A: Appaloosa

**Source:** AYHC 1st(152B-1)

13) Q: What are the tiny, folded, accordian like, interlocking projections that connect the coffin bone to the hoof wall?

A: The laminae

**Source:** AYHC 1st(455-1)

14) Q: What divides the nasal cavity into halves?

A: Nasal septum

**Source:** Kainer(42)

15) Q: What is nettlerash?

**A:** Hives

**Source:** Newhor(190)

16) Q: Name three types of saddles considered "forward seat"

**A:** All purpose, close contact, dressage

**Source:** AYHC 1st(1100-1)

17) Q: The swelling of the palmar recess of the fetlock joint capsule are called what?

A: Wind-puffs

**Source:** Kainer(14)

18) Q: What is the technical word for release of the egg cell from the ovarian follicle?

A: ovulation

**Source:** Kainer(71)

19) Q: Which type of hay has the highest calcium content?

A: Alfalfa

Source: Lewis 2nd(142)

Q: What term is used to describe the condition when a horse's respiration rate is higher than its pulse rate?

A: Inversion

**Source:** AYHC 1st(425-1)

21) Q: How is Borrelia burgdorferi most commonly transferred?

A: Ticks

**Source:** AYHC 1st(655-1)

22) Q: What are the alveoli?

**A:** Functional units of the lung where gas exchange between oxygen and carbon dioxide actually occurs

**Source:** AYHC 1st(810-1)

23) Q: Name the wedge-shaped area of the ovary from which ova are released.

A: Ovulation fossa

**Source:** AYHC 1st(910-4)

Q: What is another name for the episoplasty procedure where the vulva is artificially sealed by suturing the labia together?

**A:** Caslick operation

**Source:** AYHC 1st(910-1)

25) Q: In which epoch did the first member of the horse family originate?

A: Eocene

**Source:** Evans 2nd(4)

26) Q: What is the main difference between the Spanish Jennet and the donkey?

**A:** Spanish Jennet is a breed of horse

**Source:** Evans 2nd(43)

27) Q: What is micturition?

A: urination

Source: Evans 2nd(119)

28) Q: What medication is used to treat bradycardia?

**A:** Atropine

**Source:** Newhor(17)

29) Q: What is an exophthalmos?

**A:** Protruding eyeball

Source: Newhor(101)

30) Q: What term defines the inadequate exchange of oxygen and carbon dioxide?

**A:** Hypoventilation

Source: Newhor(147)

## 2017 NC State Horse Bowl Contest Senior Division Extra Toss Up Questions

31)	Q: What is the purpose of a Forssell's operation?				
	A: To pr	event cribbing			
	Source:	Newhor(113)			
32)	Q: What are the percentages of the offspring's coat colors that would result in repeated mating between a palomino and another palomino?				
	<b>A:</b> 25% (	chestnut, 50% palomino, 25% cremello			
	Source:	Evans 2nd(50)			
33)	<ul><li>Q: What is the whole zoological classification of the Modern Horse?</li><li>A: Kingdom - Animalia, Phylum - Chordata, Class - Mammalia, Order -</li></ul>				
	Peris	sodactyla, Family - Equidae, Genus - Equus, Species - Equus Caballus			
	Source:	Griffiths(15)			
34)	Q:				
	A:				
	Source:	()			
35)	Q:				
	A:				
	Source:	()			
36)	Q:				
	A:				
	Source:	()			
37)	Q:				
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38)

Q: A:

	Source:	()
46)	Q: A:	
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47)Q:	Δ.	
	<b>A</b> :	
	Source:	()
48)	Q:	
	A:	
	Source:	()
49)	Q:	
	A:	
	Source:	()
50)	Q:	
	A:	
	Source:	()
51)	Q:	
	A:	
	Source:	()
52)	Q:	
	A:	
	Source:	()

53)	Q: A:	
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54)	Q: A:	
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55)	Q: A:	
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56)	Q: A: Source:	()
57)	Q: A: Source:	()
58)	Q: A: Source:	()
59)	Q: A: Source:	()
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## 2017 NC State Horse Bowl Contest Senior Division Extra Bonus Questions

1) Q: Name 5 gaits that are common to most horses.

A: Walk, trot or jog, canter or lope, gallop or run, back

**Source:** Griffiths(69-70)

2) Q: What 4 parts of a horse does the term "points" refer to when discussing colors?

**A:** Mane, tail, lower leg, ear rims

**Source:** Griffiths(36)

- 3) Q: There are many advantages to the use of Artificial Insemination in the mare. Name 3.
  - A: 1. Can breed from stallions in other geographical locations. 2. Potential to improve genetics in line. 3. No need to ship the mare to another location for breeding purposes. 4. Elimination of potential injury to stallion or mare during breeding. 5. Decreased risk of disease transmission associated with breeding.

**Source:** AYHC 1st(950-1)

4) Q: Give 3 advantages of composted manure over raw manure.

A: 1. Composting produces a relatively dry end product that is easily handled (less volume and weight). 2. Composting can kill fly eggs and larvae, pathogens and weed seeds. 3. Compost has less of an odor. 4. Composted manure acts a slow release fertilizer and soil conditioner

**Source:** AYHC 1st(365-2)

Q: Horses pick up parasites by ingesting grass, feed or water that is contaminated with parasite larva and eggs. What are the 4 most common internal parasites of horses that are contracted this way?

**A:** Ascarids, Strongyles, Pinworms, Bots

**Source:** AYHC 1st(365-5)