## 2023 National FFA Veterinary Science CDE

## General Knowledge

1. At what age is a horse said to have a "full mouth", having replaced all temporary teeth with permanent ones?
A. One year of age B. Three years of age C. Five years of age D. Seven years of age
2. The layman's term "wolf teeth" refers to which kind of tooth in the horse?
A. Incisor B. Canine C. Premolar D. Molar
3. What is the layman's term for serious abdominal pain in the equine patient?
A. Lethargy B. Colic C. Maldigestion D. Peritonitis
4. Situated primarily on the right side of the horse, what is the name of the blind-ended fermentation vat immediately after the ileum?
A. Large colon B. Rumen C. Jejunum D. Cecum
5. Which macronutrient is NOT primarily absorbed by the horses' small intestine?
A. Structural carbohydrates (dietary fiber) B. Non-structural carbohydrates (starch) C. Protein D. Fat

6. What is the average gestational length in an adult horse?
A. 240 days B. 290 days C. 340 days D. 390 days
7. A horse is considered a(n) species, due to the frequency of their estrous cycle(s).
A. Monestrous B. Diestrous C. Polyestrous D. Induced ovulatory
8. A castrated male horse is called a(n)?
A. Mule B. Gelding C. Stallion D. Steer
9. In what part of the mare's reproductive tract does embryonic implantation occur?
A. Uterus B. Cervix C. Ovary D. Vulva
10. During the parturition process in the mare, one would expect which of the following sequences to normally occur (from first to last):
A. Foal passes through birth canal, frequent urination, appearance of water bag.  B. Appearance of water bag, placenta passed, foal passes through birth canal.  C. Appearance of water bag, foal passes through birth canal, placenta passed.

D. Foal's front feet present, appearance of water bag, placenta passed.

- 11. A horse with a body condition score of 8 would likely have the following physical attributes:
- A. Neck noticeable thickening; Withers fat beginning to be deposited
- B. Ribs individual ribs can be felt; Back slight (positive) crease down back
- C. Shoulders blend smoothly into body; Ribs fat over ribs fleshy/spongy
- D. Ribs difficult to feel; Tailhead fat around tailhead very soft
- 12. Restraint with a mechanical twitch works by:
- A. Releasing endorphins
- B. Creating pain as a distraction to the horse
- C. Using injectable sedatives
- D. Diversionary device
- 13. In horses' wounds can develop exuberant granulation tissue. This is commonly known as
- A. Necrotic tissue
- B. Healthy tissue growth
- C. Epithelialization
- D. Proud flesh
- 14. When treating a wound on a horse, of the following, what is the first step?
- A. Apply antibiotic ointment
- B. Remove the hair from the edges of the wound
- C. Lavage the wound
- D. Debride the wound
- 15. When bandaging wounds, the secondary layer performs what function?
- A. Debridement
- B. Covers surgical incisions/wounds
- C. Provides support
- D. Protects epithelialization

16. Reactive airway disease in horses, recognized as causing difficulty in breathing, chronic cough, wheezing, and nasal discharge, is commonly known by horse owners as:
A. Thumps B. Hives C. Heaves D. Gasps
17. The normal resting respiratory rate for a mature, full-sized horse is:
A. 28-36 breaths per minute B. 18-26 breaths per minute C. 8-16 breaths per minute D. 48-56 breaths per minute
18. The anatomical term for the large cartilaginous tube that connects the larynx to the bronchi of the lungs, and commonly known as the "windpipe" is known as:
A. Esophagus B. Trachea C. Aorta D. Ileum
19. Which of the following is a common equine respiratory disease that horse owners will have their horses vaccinated for?
A. Equine herpesvirus types 1 and 4 (Equine Rhinopeumonitis) B. West Nile Virus C. Potomac Horse Fever D. Eastern Equine Encephalitis
20. Oxygen in the lungs is exchanged between the blood capillaries and what respiratory structure?
A. Bronchi B. Villi C. Alveoli D. Trachea

21. NSAIDs are a class of drug commonly used in equine medicine, what does this acronym stand for?
A. Nonsedative anti-infection drug B. Nonsteroidal anti-infection drug C. Nonsedative anti-inflammatory drug D. Nonsteroidal anti-inflammatory drug
22. Which method below is NOT a currently available method for diagnosing parasites in horses?
A. Direct examination of feces B. Fecal dehydration C. Fecal flotation D. Fecal culture
23. Which part of the horse's hoof is normally considered non-weight bearing?
A. Sole B. Frog C. Wall D. Bars
24. What diseases are considered part of the American Association of Equine Practitioner's core vaccination schedule for adult horses?
<ul> <li>A. Eastern/Western Equine Encephalomyelitis, West Nile Virus, Equine Herpesvirus</li> <li>B. West Nile Virus, Equine Herpesvirus, Rabies</li> <li>C. Eastern/Western Equine Encephalomyelitis, West Nile Virus, Tetanus</li> <li>D. West Nile Virus, Strangles, Rabies</li> </ul>
25. Which item below is generally considered safe/non-toxic for horses to ingest?
A. Ionophores B. Oleander C. Easter Lily D. Yew

26. Which organ would chronic hepatitis affect?
A. Kidneys B. Pancreas C. Gallbladder D. Liver
27. What is true about the "big three" of radiation safety?
<ul><li>A. Shielding matters only with older patients.</li><li>B. Time means avoiding retakes, do it right the first time.</li><li>C. Distance means getting as close to the x-ray beam as is comfortable.</li><li>D. When shielding, use aprons made of a poly blend.</li></ul>
28. What is not associated with radiography settings?
A. kVp B. mAs C. PACS D. Thickness, cm
29. Which value indicates the kidneys are concentrating the urine properly?
A. Ketones B. Specific gravity C. pH D. Bilirubin
30. Which is not associated with an untreated ear infection?
A. Aural hematoma B. Anterior uveitis C. Otitis media D. Ruptured tympanum

31. Which organism does NOT contribute to canine infectious respiratory disease complex, more commonly known as "kennel cough"? A. Canine adenovirus type 2 B. Canine parainfluenza virus C. Leptospira D. Bordetella bronchiseptica 32. Which virus is NOT considered a core canine vaccine by the American Animal Hospital Association? A. Rabies virus B. Canine parvovirus C. Canine influenza virus D. Canine distemper virus 33. Which vaccine is regulated across the United States to protect public health? A. Rabies vaccine B. Canine coronavirus vaccine C. Canine influenza vaccine D. Canine distemper vaccine 34. Which syringe is most appropriate for a vaccine volume of 1 milliliter? A. 3 ml syringe B. TB syringe C. 5 ml syringe D. 6 ml syringe 35. What disease causes lameness, swollen joints, fever, and possibly swollen lymph nodes? A. Ehrlichiosis B. Lyme disease C. Anaplasmosis D. Heartworm disease

- 36. Which trait does not describe a typical terrier? (American Kennel Club)
- A. Fearless
- B. Independent
- C. Shy
- D. Bold
- 37. Which commercial blood collection tube would be used for a chemistry as it does not contain an anticoagulant? (McCurnin pg. 393 9th edition)
- A. Lavender top tube
- B. Green top tube
- C. Blue top tube
- D. Red top tube

## Key

- 1. C
- 2. C
- 3. B
- 4. D
- 5. A
- 6. C
- 7. C
- 8. B
- 9. A
- 10. C
- 11. D
- 12. A
- 13. D
- 14. B
- 15. C
- 16. C
- 17. C
- 18. B
- 19. A
- 20. C
- 21. D
- 22. B
- 23. A
- 24. C 25. C
- 26. D
- 27. B
- 28. C
- 29. B
- 30. B
- 31. C
- 32. C
- 33. A
- 34. A
- 35. B
- 36. C