

## 2026 Senior Horse Bowl Questions

- The questions will not be in this order. The numbers next to each question are only to help identify each question. There will be 30 questions in each round.
- Any questions not used in 2026 will automatically roll into 2027.
- If you have questions or need clarification, email [mrrussell@uada.edu](mailto:mrrussell@uada.edu) with question.
- Recommended sources to find answers:
  - *New Horizons – Dictionary of Equine Terms*. By New Horizons Equine Education Center, Alpine Publications, Inc.
  - *Evans 2<sup>nd</sup> – The Horse (2<sup>nd</sup> Edition)* by Evans, Borton, Hintz, Van Vleck,
  - *Kainer – The Coloring Atlas of Horse Anatomy*. Dr. Robert Kainer and Dr. Thomas McCracken, Alpine Publications, Inc.
  - *AYHC 1<sup>st</sup> – Horse Industry Handbook*, by the American Youth Horse Council, American Youth Horse Council.
  - *AYHC Youth Leaders Manual* – by the American Youth Horse Council.
  - *Lewis 2<sup>nd</sup> – Feeding and Care of the Horse* (2<sup>nd</sup> edition), by Lon D. Lewis, 456 pgs.
  - *State line tack catalog*
  - *National 4-H Horse Curriculum Books:*
    - Giddy up and Go
    - Head, Heart, and Hooves
    - Stable Relationships
    - Riding the Range
    - Jumping to new Heights

1. What is a non-infectious disorder of the central nervous system in newborn foals?
2. What important protein does colostrum contain?
3. Which organ in the digestive system is responsible for the horse's gut sounds.
4. What is the general term for the bacteria and other microorganisms that normally reside in the large intestine?
5. What is an umbilical hernia?
6. Where in the horse's body is insulin produced?
7. To eliminate parasite problems from your horse, all your parasite control procedures are directed to accomplishing what key event?
8. What type of bone fracture breaks the skin?
9. What is the syringe-like device used for giving large pills to a horse called?
10. What does the term "respiratory frequency" refer to?
11. Name the equine disease that is characterized by a respiratory illness, peripheral edema, and abortion?
12. What is the scientific study of how characteristics are passed from parent to offspring?
13. Explain the difference between a Bog Spavin and a Jack Spavin.
14. Perlino is a double dilution of which basic body color?
15. What is "Lock Jaw" commonly referred to as?
16. Give two reasons molasses are added to grain mixes.
17. What do you call the first feces of the foal after birth?
18. What are the two most important aspects of ideal conformation of the forelimbs?
19. Protective pieces (usually made of metal) fastened to the bottom of a horse's hooves that protects the wall is called?

20. Give another name for the oviducts.

21. In a horse how many pairs of ribs are true and how many are floating?

22. \_\_\_\_\_ is an organic poison; usually a protein produced by a living organism.

23. What is the term for red blood cells?

24. Which breed contains animals of both horse & pony sizes?

25. What are the long, slender thread-like structures that are paired and contain genetic material?

26. Reins that are crossed and rested on top of the horse's withers so that the horse pulls against himself is called?

27. What is the most effective treatment for Recurrent Airway Obstruction?

28. What is the common name for parascaris equorum?

29. Why is "balance" the single most important characteristic in equine selections?

30. The top of the vertebrae on a horse where the neck meets the back is known as?

31. In what year was the American Quarter Horse Association formed?

32. What is the most common vector for transmission of equine encephalomyelitis?

33. What part of the horse's foot provides traction and absorbs shock?

34. What breed of the horse is noted for having Hyperkalemic Periodic Paralysis?

35. What is the name for the process that breaks down carbohydrates, lipids and proteins into energy (ATP) with the involvement of oxygen?

36. The system in which a number of ductless glands of body produce hormones to regulate growth, reproduction, metabolism, and digestion is known as?

37. Name the mineral needed for blood coagulation?

38. The "1st digital phalanx" is just below what bone.

39. What is meant by parturition?

40. What is the function of the pancreas?

41. What are the functions of the larynx?

42. What do you call a class of forages that must be re-planted each year?

43. (Two-part) What are the two major components of blood?

44. What chamber of the heart is the primary pumping chamber for moving oxygenated blood to the body?

45. When referring to the process of a disease, what does acute mean?

46. Prolonged consumption of plants that contain oxalate may cause the deficiency of what mineral to develop?

47. \_\_\_\_\_ is a wound due to the wearing away of the hair and top layer of skin by friction.

48. Name two systems of the horse that use smooth muscles.

49. Name four of the seven joints in the pelvic limbs.

50. Name the five regions of the spinal column.

51. What parasite of the horse has both parasitic and free-living generations and affects primarily young foals?

52. Horses have how many pairs of chromosomes?

53. What term is used to describe the failure of the immune system to form?

54. The meninges are three membranes covering what two neurological structures?

55. In designing a deworming program, what time of year does research show little transmission occurs and deworming is not needed?

56. What disease is characterized by an excessive breathing noise usually heard during exercise caused by an upper airway obstruction?

57. The headquarters for the American Quarter Horse Association is located in what city and state?

58. What event normally occurs 24-48 hours prior to the end of the estrus cycle?

59. Define the term seasonally polyestrous

60. What is the proper anatomical name for the three bones of the horses that are found between the hock and the fetlock joints?

61. What parasite will usually causes the horse to rub its tail?

62. Which part of the brain controls the coordination of movement?

63. How much more nutrient dense is digested fat compared to digested protein or carbohydrate in terms of energy?

64. What is the unique feature of the 'happy mouth' bit?

65. What gland secretes insulin?

66. Name the protozoal disease that causes anemia and is vectored by tropical ticks.

67. A sorghum plant species; this plant contains cyanide and causes difficulty breathing, cherry-red blood, and death. What is it called?

68. The lowering of oxygen saturation of the arterial blood is called what?

69. What are the units of inheritance called?

70. List 5 signs of colic.

71. What is Banamine and what is it used for? Try to be specific.

72. Exercise involves the conversion of chemical energy to what type of energy?

73. What amount (percentage) of dry forage should a horse consume daily?

74. What disease is characterized by swollen or abscessed lymph glands, particularly those under or behind the jaws?

75. What is the parasite that lays eggs on the hair of the horse, usually its legs?

76. The examination of a body after death; generally to determine cause of death is known as?

77. What is the name for the tendon which acts to straighten a joint?

78. What is the production of milk called?

79. From distal to proximal, list the six joints of the front leg.

80. For what viral disease are horses and humans considered a “dead-end” because both species have so few of these virus particles in their bloodstream following infection that they cannot pass it on to another mammal?

81. \_\_\_\_\_ is the most common cause of colic.

82. What is the disorder that is associated with dysfunctions of the larynx causing roaring

83. When the weight of the horse is not evenly distributed over all four legs and more weight is on the front legs, the horse is said to be heavy on the \_\_\_\_\_?

84. What endocrine gland regulates the basic metabolism?

85. What is the name of the anti-coagulant in moldy clover hay that can cause blood not to clot?

86. What is meant by the term “silent heat”?

87. What is the distinguishing characteristic of a Mullen mouthpiece?

88. Concerning equine reproduction, what does BSE stand for?

89. Name the four classifications of bones in the horse.

90. What piece of equipment is used to shape & make shoes?

91. An accumulation of fluid in the alveoli from an infectious pulmonary problem would be termed what?

92. Explain the difference between Tetanus Toxoid shot and Tetanus Antitoxin.

93. An emergency bridle made of rope and used in leading or riding unruly horses by exerting pressure on the poll is called?

94. What is a cloudy, opaque appearance of the eye called?

95. Name the two hormones released by the pituitary gland to regulate the estrous cycle.

96. Where is the small intestine located in the horse?

97. What is the expected ratio of roan to solid-colored foals, if a roan stallion is bred to a roan mare?

98. What is the function of the white blood cells?

99. A horse belonging to a specific breed and having “papers” to document its ancestors is?

100. What is the normal gestation of a mare?

101. What do we call the concave side of the ovary that gives it a “kidney bean” shape?

102. The amount of nutrients used by the horse’s system and is known as TDN. What does TDN stand for?

103. What is the “first milk” a colt receives called?

104. What is the average hoof growth rate for all horses (per month)?

105. What is the most feasible, non-chemical means of breaking the fly life cycle?

106. What is interdental space?

107. What are the functional units of the lung where gas exchange occurs?

108. What is the name of the bend in the large intestine which connects the left ventral colon to the left dorsal colon?

109. Why should you use a tighter curb chain on a half-breed or spade bit?

110. Horses whose toes point inward or toed in are referred to as?

111. Muscles that oppose each other and limit movement are referred to as what type of muscle?

112. A respiratory ailment that is characterized by forced expiration and difficulty breathing; resulting from the rupture of alveoli in the lungs; caused by such things as allergies and dust:

113. What is necrosis?

114. What is the normal pulse of a horse per minute?

115. What is another name for moon blindness?

116. Strongyles are the most common internal parasite of horses today. What is the infective stage of the Strongyle?

117. The production of energy in the muscles via the glycolytic pathway yields what end product?

118. \_\_\_\_\_ is a type of reins that are a long combination lead rope and reins attached to the heel of a bosal.

119. Name 2 methods of restraining a horse.

120. To give an animal (usually by injection) protection or immunity from a specific disease is called?

121. Define the “stride stance phase” of a horse’s gait.

122. What is pulmonary hemorrhage?

123. Give two reasons for putting a hot poultice on a horse?
124. An obstacle used in cross-country and show jumping consisting of upright posts separated by a number of horizontal rails is called?
125. What muscle is responsible for the skin moving and the shaking of flies off the horse?
126. What part of the equine GI tract is found between the jejunum and the cecum?
127. Give three functions of the horse's kidneys.
128. What does net energy refer to?
129. What piece of equipment is designed for easy removal of driven nails from creased or fullered shoes & can also be used to pull nails from pads on show horses?
130. SCID is a genetic disease that is associated with the Arabian breed. What does SCID stand for?
131. What hormone is responsible for milk let-down and contractions during parturition?
132. Name four causes for hyperthermia.
133. What type of saddle places the rider well behind the withers and just behind the "center" of the horses?
134. How, what year, and why was the Cooperative Extension Service established?
135. Which part of the brain controls reproduction?
136. What two parts of the horse does the deep digital flexor tendon connect?
137. Bacterial degradation of animal waste forms two by-products that encourage algae blooms in streams and ponds. What are these two by-products?

138. What is a chronic purulent inflammation of the lateral cartilage of the hoof, characterized by draining tracts at or just above the coronary band that periodically heal and reopen?

139. Chronic Pulmonary Disease is also known as \_\_\_\_\_?

140. Name three causes of foal diarrhea.

141. What is the effect of placing a blanket on a horse with a winter coat?

142. Polysaccharide Storage Myopathy or PSSM common in heavily muscled breeds, is likely caused by the abnormal storage of what compound within muscle?

143. What is the unique feature of a bit with a mouth piece made from copper?

144. Approximately what percent of total body calcium is contained in the skeleton and teeth?

145. Name 5 conformational defects whose common name refers to another species of animal.

146. What internal parts of the horse make up the central nervous system?

147. Two-part question. How can you visually appraise plant maturity of grass and legume hays?

148. What is the coronary cushion?

149. What animal is known for a dorsal stripe running from mane to tail that is intersected by the arms of cross at the withers?

150. Equine sweat is hypertonic, what is this?

151. What is a bony growth at the point where the cannon and hock attach?

152. What are the four stages of a fly's life cycle?

153. What is the product of a stallion and a jenny called?

154. Name the toxin found in blister beetles. It may be given as a diuretic and applied externally to produce blistering.

155. What hoof disease is commonly a result of owner neglect and dirty wet living conditions for the horse?

156. \_\_\_\_\_ is disk shaped structures found in the blood of horses and chiefly known for their role in blood coagulation.

157. Fullering, web, and branch are parts of what horse equipment?

158. What is the structure in the cell of the horse that carries genes?

159. Where, specifically, is the external loin or coupling located on the horse?

160. Give three symptoms of liver failure.

161. What are the three acceptable methods of euthanasia?

162. What events mark the end of each of the three stages of parturition in the mare?

163. List four ways grain can be processed for horse feed.

164. Give four areas of the horse that may be observed for body fat.

165. Name the species of parasite that have vestigial (non-working) mouth parts as adults and feed only in their larval stage, on blood and tissues of the horse's stomach and duodenum

166. Name the three main categories of plant toxins that cause sudden death?

167. What bacterium is usually present in the affected tissues of the hoof?

168. The coronary cushion is the elastic portion of what structure of the hoof?

169. Sometimes called the "funny bone", spell the name of the bone extending from the shoulder to the elbow.

170. What is another name for chronic obstructive pulmonary disease?

171. Colic is associated with what type of pain?

172. Name the four chambers of the heart in order of how blood flows through these chambers beginning with body to heart, heart to lungs, lungs to heart, heart to body.

173. \_\_\_\_\_ are used on horseshoes to take the stress off the nails and stabilize the shoe on the foot.

174. What is the primary portal for infection in the newborn foal?

175. What does the term “passive transfer of immunity” mean?

176. Weak Flexor Tendons are also known as?

177. Name three types of negative reinforcements in training horses.

178. What metal alloy can be used for horseshoes that maintains the light weight of aluminum, but has the durability of steel?

179. What body condition score would you assign a horse with an obvious crease down his back, patchy fat appearing over ribs, and bulging fat around tailhead?

180. Name 4 ways in which grains differ nutritionally.

181. What is a sweet itch?

182. This disease is a bacterial infection spread by ticks; infects humans as well as domesticated animals, including horses. Symptoms include lethargy, fever, swollen joints, shifting leg lameness, and sensitive skin.

183. Name 5 ways forage can be processed for a horse to eat.

184. This part of the horse includes the withers, back, loin, or coupling, and croup?

185. Epidermal growths caused by a papilloma virus; usually occur around the heads of young horses up to three years old; they can vary in number from a few to a hundred.

186. Name one type of legume hay?

187. What is the average length of the estrous cycle in the mare?
188. What are founder rings?
189. Gene pairs that are not identical are called what?
190. What piece of equipment does the farrier use to pull nails from creased or fullered shoes?
191. A color term for a black and white horse; coat color in Paint and Pintos; patches of black and white, is known as?
192. What is a sarcoid?
193. What is the single most important characteristic in equine selection?
194. Name the artery that carries oxygen poor blood from the heart to the lungs?
195. Name the three permanent incisors and the age that they appear.
196. What are the 4 types of hernias that occur in foals?
197. What is an “obligate parasite”?
198. A normal keg shoe has four nail holes on each side. What term is applied to the second and third holes (what are these holes usually called)?
199. Horses that have toes that point out are referred to as?
200. Excessive intake of what vitamin causes calcification of lungs, heart, kidneys, and other organs?
201. A mature male horse over 3 years old usually kept for breeding purposes is called a?
202. Name one function that sodium, potassium, and chloride are essential for.
203. Name three systems for the horse’s body that use smooth muscles?

204. What is the proper name (genus and species) of the large internal parasite of the horse where larval migration can damage the liver and lungs, the adults live in the small intestine, and they primarily affect foals?

205. In which organ would you find the cortex, medulla, loop of Henle, and glomerulus?

206. Which vice is characterized by biting or setting the teeth against the fence or some other object while sucking air?

207. Osteoblasts form a protein matrix that ultimately forms what tissue?

208. What is a common term for diarrhea, usually found in foals that have many different specific and non-specific causes?

209. White muscle disease in young foals is caused by a deficiency of what trace nutrient?

210. What is blood spavin?

211. What are the bird catcher spots?

212. Name 3 minerals found in trace mineral salt.

213. What are the 3 major types of hay?

214. The study of blood and blood-forming organs is known as?

215. Name 4 types of colic.

216. What is the primary sign of iron deficiency?

217. What is the responsibility of the urinary system?

218. What are erythrocytes?

219. How does the horse use its binocular vision?

220. What part of the body does encephalomyelitis affect?

221. What is an abscess?

222. \_\_\_\_\_ is a term to describe evasion of the bit; the when the horse carries his head too high and is difficult to control.

223. Equine Night Blindness is most seen in what breed?

224. What is the name of the fatal genetic disorder of Quarter Horse foals where glycogen storage is disrupted (different from polysaccharide storage myopathy)?

225. How many hands is the average quarter horse?

226. Simultaneously, blood enters the right atrium from the body and the left atrium from where?

227. Located beneath the ear, what is the largest of the horse's three salivary glands?

228. The ovary is responsible for the production of which two female hormones?

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

230. Why are the sensitive structures of a horse's hoof called sensitive?

231. Why do horses that "Tie-Ip" sometimes have dark colored or coffee colored urine?

232. \_\_\_\_\_ are ears that are carried in a loose, inattentive, sluggish manner.

233. What are the two primary hormones the horse's adrenal glands release?

234. Identify this horse coat color: the body color is yellowish or gold; with the mane and tail being mixed yellow, white, black, brown, or red. This color horse usually has a dorsal stripe, zebra stripes on the legs and transverse stripe over the withers.

235. In inches, how fast does the hoof wall grow per month?

236. What type of shavings should not be used for bedding because horses can develop founder from it?

237. What is a displaced patella of the stifle joint called?

238. Name 2 examples of cereal grains.

239. What is the swelling of the tarsocrural joint capsule called?

240. Name 5 structural deviations of the front legs:

241. During what stage of the mare's estrous cycle is the mare receptive to the stallion?

242. Name 3 different hay/forage types.

243. What is the name for the flexible quirt that is attached to "California-style" reins?

244. Name 4 protein supplements that are commonly fed to horses.

245. Why is the hoof wall harder at the toe than at the quarters?

246. Name 3 benefits of therapeutic riding on an individual with a disability.

247. What is caused by Streptococcus equi infection?

248. What is the spasmodic muscle contraction that produces heat to help maintain body temperature?

249. In horse racing, when the horses leave the paddock, come on the racetrack, and walk in front of the stands, \_\_\_\_\_ is occurring?

250. What is the common name for Equine Spinal Ataxia?