DODVPR 2016 End of Year Self Assessment Large Animal

1. Write your name above and on each page of the exam packet.

2. For each question, select the ONE best answer and mark it on the answer sheet.

3. Use capital letters on your answer sheet.

4. Credit will be given only for correct answers recorded on the answer sheet.

5. All questions for which more than one answer is marked will be recorded as incorrect.

6. No credit will be awarded or deducted for incorrect answers.

7. Turn in BOTH your answer sheet and the exam question packet at the conclusion of the exam.
2016 Large Animal
Mock Exam

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1. Which is the most common histologic finding in horses with West Nile virus?
   a. Nonsuppurative meningoencephalomyelitis in the brainstem
   b. Neuronal necrosis within cerebellar nuclei
   c. Spinal cord neuronal degeneration with few intracytoplasmic viral inclusions
   d. Cerebral cortical spongiosis with Alzheimer type II astrocytosis

2. The most likely cause of pyogranulomatous and fibrosing glossitis in an ox is:
   a. Actinomyces bovis
   b. Nocardia spp.
   c. Staphylococcus aureus
   d. Actinobacillus lignieresii

3. Which is true regarding Brachyspira spp. in swine?
   a. It is chemotactically attracted to porcine mucus.
   b. It has a tropism for immature dividing enterocytes
   c. Due to a requirement for triphosphates it replicates in the apical enterocyte cytoplasm near the mitochondria.
   d. Infected crypt cells divide continuously, disrupting normal maturation and resulting in decreased goblet cells

4. Bovine dermatosparaxis is due to which of the following?
   a. Laminin 5 defect
   b. Fibrillin 1 defect
   c. Cyclophilin B defect
   d. Procollagen I N-proteinase defect

5. Which of the following is the most consistent lesion in fetus with porcine arterivirus?
   a. Cerebellar hypoplasia and arthryogryposis
   b. Granulomatous interstitial pneumonia
   c. Pulmonary hypoplasia
   d. Segmental umbilical cord hemorrhage

6. A cow with gangrenous pododermatitis, hyperthermia and hypagalactia likely ingested:
   a. paxilline
   b. fumonisin B1
   c. ergovaline
   d. Lolitrem B

7. In swine, cerebral laminar cortical grey matter necrosis, edema & eosinophils are pathognomonic for:
1. Thiamine deficiency
2. Sulfur toxicity
3. Lead toxicity
4. Salt toxicity

8. Which is not a typical gross finding in African swine fever?
   a. Abortion with anasarcous fetus
   b. Multiple marginal splenic infarcts
   c. Gallbladder edema
   d. Hemorrhagic lymph nodes

9. The underlying defect in hyperkalemic periodic paralysis horses is:
   a. Dynamin 1
   b. Myotubularin
   c. Skeletal muscle choride channel
   d. Skeletal muscle sodium channel

10. Which is the mechanism of action of the *Bacillus anthracis* virulence determinant known as “edema factor”?
    a. Creates a pore in the cell membrane
    b. Increases intracellular levels of cAMP
    c. Inactivates MAPK (JKP
    d. Inhibits phagocytosis

11. Horses with cervical stenotic myelopathy had which of the following lesions in their cervical articular processes?
    a. Fibrillation of the articular cartilage
    b. True bone cysts
    c. Osteophytes
    d. Clusters of chondrones

12. A newborn lamb with hydranencaphly, arthrogryposis and loss of spinal ventral motor neurons is consistent with infection of which of the following?
    a. Border disease virus
    b. Bovine viral diarrhea virus
    c. Akabane virus
    d. Schmallenberg virus

13. Which is a likely etiology in a sheep with proliferative bronchiolitis/alveolitis with type II pneumocyte & bronchiolar hyperplasia, foamy macrophages with intracytoplasmic inclusions, necrosis & inflammation?
    a. Lentivirus
    b. Morbillivirus
    c. Capripoxvirus
    d. Adenovirus
14. What is the most likely underlying cause in a calf with severe cerebral spongy vacuolation of myelin as well as splitting of myelin lamellae at the intraperiod line on electron microscopy?
   a. Prion disease (bovine spongiform encephalopathy)
   b. Deficient branched-chain α-ketoacid dehydrogenase
   c. Bovine pestivirus
   d. Deficient β-galactosidase

15. Which of the following is associated with Hendra virus in horses?
   a. Endothelial syncytial cells
   b. Tropism for rapidly dividing cells
   c. Destruction of lymphoid tissue
   d. Necrosis of bronchial epithelial cells and alveolar macrophages

16. Which of the following is a cause of vertebral malformations in cattle?
   a. Manganese deficiency
   b. Vitamin A deficiency
   c. Vitamin A toxicity
   d. Parbendazole toxicity

17. A recent outbreak of sodium fluoroacetate intoxication in sheep was characterized by:
   a. Myocardial necrosis & inflammation
   b. Bilaterally symmetric poliomyelomalacia
   c. Renal tubular ischemic necrosis
   d. Centrilobular hepatic necrosis with marked cholestasis

18. The most pathognomonic histologic finding in swine influenza is?
   a. Necrotizing bronchitis/bronchiolitis
   b. Lymphoplasmacytic interstitial pneumonia
   c. Alveolar proteinosis
   d. Type II pneumocyte hyperplasia

19. The acute stage of Besnoitia spp. infection in cattle is associated with?
   a. Dermal tissue cyst formation
   b. Laminitis
   c. Vascular lesions
   d. Meningoencephalitis

20. Which cell types does the virulence factor, Aqx, of Actinobacillus equuli affect?
   a. Erythrocytes and platelets
   b. Erythrocytes and lymphocytes
   c. Lymphocytes and macrophages
   d. Lymphocytes and neutrophils

21. Lkt, the toxin from Mannheimia haemolytica, binds which of the following?
   a. CD11a
b. CD18
c. L-selectin
d. VLA-4

22. Which causes perirenal edema in swine?
   a. *Amaranthus retroflexus*
   b. Aminoglycoside
   c. *Acer rubrum*
   d. *Vicia villosa*

23. Hereditary glomerulonephritis of Finnish Landrace sheep is due to?
   a. Defect in fibrocystin gene
   b. Deficiency of C3
   c. Factor H deficiency
   d. Defective IgA

24. Which of the following is the likely etiology in an ox with diffuse lymphoblastic hyperplasia and Koch’s blue bodies?
   a. *Theileria parva*
   b. Bovine leukemia virus
   c. *Cytauxzoon* spp.
   d. Malignant catarrhal fever virus

25. “Bright blindness” or progressive retinal degeneration in sheep has been associated with:
   a. Taurine deficiency
   b. *Leptospira* spp.
   c. Bracken fern
   d. Defects in paracellin-1