

Name \_\_\_\_\_

## **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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Name: \_\_\_\_\_

### 2016 End of Year Self Assessment Large Animal

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 arthrogryposis
  - b. Granulomatous interstitial pneumonia
  - c. Pulmonary hypoplasia
  - d. Segmental umbilical cord hemorrhage
  
6. A cow with gangrenous pododermatitis, hyperthermia and hypogalactia 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:

- a. Thiamine deficiency
  - b. Sulfur toxicity
  - c. Lead toxicity
  - d. Salt toxicity
8. Which is not a typical gross finding in African swine fever?
- a. Abortion with anasarctous 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 chloride 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 (JNK)
  - 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 chondrons
12. A newborn lamb with hydranencephaly, arthrogryposis and loss of spinal ventral motor neurons is consistent with infection of which of the following?
- a. Border disease virus
  - b. Bovine viral diarrhoea 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?
- Prion disease (bovine spongiform encephalopathy)
  - Deficient branched-chain  $\alpha$ -ketoacid dehydrogenase
  - Bovine pestivirus
  - Deficient  $\beta$ -galactosidase
15. Which of the following is associated with Hendra virus in horses?
- Endothelial syncytial cells
  - Tropism for rapidly dividing cells
  - Destruction of lymphoid tissue
  - Necrosis of bronchial epithelial cells and alveolar macrophages
16. Which of the following is a cause of vertebral malformations in cattle?
- Manganese deficiency
  - Vitamin A deficiency
  - Vitamin A toxicity
  - Parabendazole toxicity
17. A recent outbreak of sodium fluoroacetate intoxication in sheep was characterized by:
- Myocardial necrosis & inflammation
  - Bilaterally symmetric poliomyelomalacia
  - Renal tubular ischemic necrosis
  - Centrilobular hepatic necrosis with marked cholestasis
18. The most pathognomonic histologic finding in swine influenza is?
- Necrotizing bronchitis/bronchiolitis
  - Lymphoplasmacytic interstitial pneumonia
  - Alveolar proteinosis
  - Type II pneumocyte hyperplasia
19. The acute stage of *Besnoitia* spp. infection in cattle is associated with?
- Dermal tissue cyst formation
  - Laminitis
  - Vascular lesions
  - Meningoencephalitis
20. Which cell types does the virulence factor, Aqx, of *Actinobacillus equuli* affect?
- Erythrocytes and platelets
  - Erythrocytes and lymphocytes
  - Lymphocytes and macrophages
  - Lymphocytes and neutrophils
21. *Lkt*, the toxin from *Mannheimia haemolytica*, binds which of the following?
- 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