

Name _____

DODVPR 2016 End of Year Self Assessment Small 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 Small Animal
Mock Exam

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Name: _____

2016 End of Year Self Assessment Small Animal

1. Melanin may be produced by pathogenic organisms as a virulence factor. What enzyme produces melanin in *Cryptococcus neoformans*?
 - a. Laccase
 - b. tyrosinase
 - c. phosphatidyl melinase
 - d. catalase

2. Which of the following histologic findings is most likely to be associated with chronic intestinal pseudo-obstruction in dogs?
 - a. Segmental hypertrophy and hyperplasia of the tunica muscularis
 - b. Lymphoplasmacytic myositis with myofiber degeneration of the tunica muscularis
 - c. Transmural eosinophilic sclerosing fibroplasia
 - d. Lymphohistiocytic myenteric ganglioneuritis

3. Metaphyseal sclerosis in dogs due to transient impairment of osteoclastic resorption is associated with ____?
 - a. Canine morbillivirus
 - b. Canine influenza H3N8
 - c. Canine parvovirus 2
 - d. Canine circovirus

4. Canine globoid cell leukodystrophy is due to a defect in lysosomal:
 - a. Sphingomyelinase
 - b. galactocerebrosidase
 - c. Beta-hexosaminidase
 - d. Beta-galactosidase

5. According to a recent report, cats with hypertrophic cardiomyopathy as well as lymphohistiocytic myocarditis should be tested for which of the following?
 - a. FeLV
 - b. FIV
 - c. Calicivirus
 - d. Feline parvovirus

6. In dogs, pemphigus vulgaris autoantibodies recognize which of the following?
 - a. BPA180
 - b. desmocollin 1
 - c. desmoglein 3
 - d. type VII collagen

7. What is the major mechanism of action in ethylene glycol toxicosis in dogs and cats?

- a. Ethylene glycol oxidized to glycoaldehyde, which causes ATP depletion and damage to membrane phospholipids.
 - b. Ethylene glycol causes renal vasoconstriction and is directly toxic to renal tubular epithelial cells.
 - c. Ethylene glycol accumulates in lysosomes of renal tubular epithelial cells and inhibits phospholipases, resulting in lysosomal dysfunction and leakage.
 - d. Ethylene glycol lyses erythrocytes, resulting in ischemic renal tubular necrosis.
8. Feline chronic kidney disease is associated with upregulation of:
- a. Transglutaminase 2
 - b. Lysyl oxidase
 - c. GLUT 1
 - d. VEGFA
9. All of the following *EXCEPT* ____ are likely etiologic agents in a cat with ulcerative rhinitis and stomatitis with conjunctivitis.
- a. Feline calicivirus
 - b. Feline herpesvirus 1
 - c. *Chlamydophila* spp.
 - d. *Bordetella bronchiseptica*
10. Which is true regarding the mechanism of action of *Clostridium botulinum*?
- a. Neurotoxin inhibits acetylcholine release at myoneural junction via cleavage of SNARE proteins
 - b. Neurotoxin spreads via retrograde axonal transport
 - c. Neurotoxin induces glutamine release from astrocytes causing glutamate induced neuronal necrosis
 - d. Neurotoxin inhibits inhibitory neurotransmitter at neural neural junction via cleavage of SNARE proteins
11. Feline infectious peritonitis virus replicates in which of the following?
- a. Endothelial cells
 - b. Macrophages
 - c. B-lymphocytes
 - d. T-lymphocytes
12. Chiari-like malformation & syringomyelia are prevalent in which dog breed?
- a. German shepherd
 - b. American Brussels Griffon
 - c. French bulldog
 - d. Wirehaired miniature dachshund
13. What clinical pathological feature is commonly associated with canine gastric leiomyomas?
- a. Hypoalbuminemia
 - b. Hyperglobulinemia

- c. Hypoglycemia
 - d. Elevated ALP
14. Which of the following is associated with decreased metallothionein labeling in canine chronic primary hepatitis?
- a. Hepatic inflammation
 - b. Hepatic fibrosis
 - c. Hepatic regeneration
 - d. Hepatic glycogenesis
15. Which of the following parameters is most strongly associated with recurrence of canine perivascular wall tumors?
- a. Tumor size
 - b. Mitotic index
 - c. Nuclear pleomorphism
 - d. Amount of necrosis
16. Miniature dachshunds are predisposed to:
- a. Inflammatory colorectal polyps
 - b. Defects in cobalamin uptake
 - c. Hyperlipidemia
 - d. Osteogenesis imperfecta
17. Which of the following stains would be most useful for distinguishing canine osteosarcoma from fibrosarcoma?
- a. Osteocalcin
 - b. Osteonectin
 - c. Vimentin
 - d. Osteoprotegrin
18. A cat with histiocytic vascular occlusion with cerebral infarcts likely has which of the following?
- a. Globoid cell leukodystrophy
 - b. Histiocytic sarcoma
 - c. Feline infectious peritonitis virus
 - d. *Cytauxzoon felis*
19. Congenital hereditary lymphedema in dogs is thought to be caused by defective _____ on lymphendothelial cells.
- a. VEGFR3
 - b. T1 α podoplanin
 - c. Ephrin B5
 - d. VEGFD
20. Which of the following is found in canine neutrophils?
- a. *Anaplasma phagocytophilum*
 - b. *Ehrlichia canis*
 - c. *Anaplasma platys*
 - d. *Rickettsia rickettsii*

21. The following IHC pattern is most consistent with which condition?
Positive: CD11d/CD18, MHCII
Negative: CD11c, E-cadherin
- Disseminated histiocytic sarcoma
 - Cutaneous histiocytoma
 - Disseminated histiocytosis
 - Splenic hemophagocytic histiocytic sarcoma
22. Which of the following causes cytolytic infections of mucosal epithelial cells in cats with establishment of latency in the trigeminal ganglion, optic nerve, olfactory bulb and cornea?
- Feline calicivirus
 - Feline herpesvirus 1
 - Canine morbillivirus
 - Feline coronavirus
23. Which subtype of feline leukemia virus is associated with neoplastic transformation & lymphoma?
- FeLV-A
 - FeLV-B
 - FeLV-C
 - FeLV-D
24. A testicular neoplasm whose cells stain immunohistochemically with Sall4, PGP9.5 and PLAP (placental alkaline phosphatase) is most consistent with?
- Seminoma
 - Interstitial cell tumor
 - Sertoli cell tumor
 - Yolk-sac carcinoma
25. Decreased/absent _____ may play a role in deficient tear production in dogs with keratoconjunctivitis sicca (KCS).
- AQP2
 - AQP3
 - AQP4
 - AQP5