Name_____

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

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Name:_____

2016 End of Year Self Assessment Lab Animal

1. Experimentally induced rabies in rabbits has been associated with:
    a. Acute renal tubular necrosis
    b. Splenic lymphoid hyperplasia
    c. Hepatocellular vacuolar degeneration
    d. Myocardial degeneration and necrosis

2. Murine noravirus is most likely to cause lethal disease in mice deficient in:
    a. STAT1
    b. Rag1
    c. CD18
    d. C5

3. A guinea pig with oral mucosal abrasions and bilateral suppurative cervical lymphadenitis is likely infected with:
    a. Streptococcus pneumoniae
    b. *Streptococcus equi* subsp *zooepidemicus*
    c. Streptobacillus moniliformis
    d. *Streptococus equi* subsp *equi*

4. Which mouse strain is prone to prolactin-producing pituitary adenomas and mammary hyperplasia?
    a. BALB/c
    b. C3H/He
    c. 129
    d. FVB

5. Which of the following outlines the pathogenesis of domoic acid neuronal necrosis in rats?
    a. Binding/inhibition of GABA receptors of the internuncial neurons by domoic acid
    b. Calcium influx following interaction of domoic acid with AMPA and glutamate receptors
    c. Reduced activity of ATP-dependent sodium and water transport mechanisms leading to intraneuronal swelling
    d. Glutathione depletion, increased reactive oxygen species, and cell membrane damage

6. Which is the most likely cause of atypical type II pneumocyte hyperplasia with syncytia, intracytoplasmic inclusion bodies and minimal necrosis in a nude mouse?
    a. Respirovirus
    b. Type B retrovirus
    c. Mycoplasma pulmonis

d. Pneumovirus

7. Polioencephalomalacia in squirrel monkeys was recently associated with:
    a. Hypernatremia
    b. Mercury toxicity
    c. Thiamine deficiency
    d. Molybdenum toxicity

8. Phacoclastic uveitis, cataracts and torticollis in a dwarf rabbit is likely secondary to which of the following?
    a. *Listeria monocytogenes* infection
    b. *Encephalitozoon cuniculi* infection
    c. Xylazine administration
    d. Cholecalciferal containing rodenticides

9. The pathogenesis of adrenal-associated endocrinopathy (AAE) in ferrets involves _____.
    a. Functional pituitary adenomas producing ACTH which stimulates the adrenal cortex
    b. Disruption of negative feedback of gonadotropin-releasing hormone (GnRH) and luteinizing hormone (LH) release from the hypothalamus
    c. Long term administration of corticosteroids
    d. Immune mediated destruction of the adrenal cortex

10. Intestinal chordoma is relatively common in which species?
    a. Zebrafish
    b. Ferret
    c. Gerbil
    d. F344 rat

11. Which of the following is true regarding hamster polyomavirus?
    a. Induces formation of papillomas in immunocompromised individuals
    b. In aged hamsters, is associated with epizootics of lymphoma which contain numerous infectious virus particles
    c. Associated with follicular tumors which have replicating virus within keratinizing epithelium
    d. Associated with white matter demyelination and intranuclear inclusions within reactive astrocytes

12. A recent study associated ringtail in mice with:
    a. A disorder of keratinization
    b. Vitamin A deficiency
    c. Autoimmune process
    d. Primary seborrhea

13. A guinea pig with conjunctivitis and epithelial intracytoplasmic inclusion bodies on a Giemsa-stained conjunctival smear has likely been infected with:
    a. Cavian herpesvirus 1

b. *Chlamydophila caviae*
c. *Leptospira pomona*
d. Coronavirus

14. Which is the most common primary site of mesothelioma in aged F344 rats?
    a. Pleura
    b. Intestinal serosa
    c. Pericardium
    d. Tunica vaginalis

15. Vitamin C deficiency in the guinea pig fetus is associated with_____?
    a. Chondrodysplasia
    b. Anodontia
    c. Lissencephaly
    d. Ventricular-septal defect

16. In ferrets, homozygosity for aleutian (blue) coat color gene is associated with:
    a. Albinism
    b. Chondrodysplasia
    c. Susceptibility to amdoviral glomerulonephritis
    d. Pelger-Huet anomaly

17. Chronic bismuth administration in rhesus macaques has been associated with which of the following?
    a. Hepatic lipidosis
    b. Alveoli flooded with lipid laden macrophages
    c. Purkinje cells with abundant lipofuscin
    d. Intranuclear inclusions in renal tubular epithelium

18. An aging C3H mouse with dystrophic hair formation, pigmentary incontinence, densely packed anagen follicles and mononuclear perifollicular infiltrates likely has:
    a. Clown mouse syndrome
    b. Alopecia areata
    c. Color dilution alopecia
    d. Ectromelia

19. Rhesus cytomegalovirus (macacine herpesvirus 3) was recently associated with which of the following lesions in SIV infected macaques?
    a. Osteomyelitis
    b. retroperitoneal fibromatosis
    c. Facial neuritis
    d. Lymphoma

20. Brown Norway rats are predisposed to which of the following?
    a. Senile amyloidosis

b. Eosinophilic granulomatous pneumonia
c. Polycystic kidneys
d. Retinal degeneration

21. Which of the following is a relatively common background lesion in Gottingen minipigs?
    a. Osteochondrosis dissecans
    b. Hepatic capsular fibrosis
    c. Renal inflammatory infiltrates
    d. Splenic lymphoid hyperplasia

22. A rat with keratoconjunctivitis and sialoadenitis with ductular squamous metaplasia affecting the parotid salivary gland likely has:
    a. Vitamin A deficiency
    b. Cytomegalovirus
    c. Polyomavirus
    d. Coronavirus

23. Hypocallosity common in with mouse strain?
    a. DBA/2 mice
    b. A/J
    c. C3H
    d. BALB/c

24. In New World Monkeys, which are the typical measles lesions?
    a. Necrotizing bronchointerstitial pneumonia with syncytia, intranuclear & intracytoplasmic inclusions
    b. Necrohemorrhagic enterocolitis
    c. Maculopapular rash on face, ventral abdomen, inner thighs
    d. Nonsuppurative encephalitis w/ intranuclear & intracytoplasmic viral inclusions in astrocytes and neurons

25. Which of the following is true regarding mouse AA amyloidosis?
    a. SAA1 and SAA2 are negative acute-phase proteins synthesized in the liver in response to IL-10
    b. SAA proteins circulate in the blood associated with albumin
    c. Only SAA2 is deposited as amyloid fibrils in mice
    d. Injection of AA amyloid fibrils from amyloid-laden organs in mice can cause prion-like transmission of amyloidosis