

## Large Animal Miniboard Exam 2010

1. With Borna disease in horses, pathognomonic Joest-Degen inclusion bodies are located mainly in:
  - A. Neuronal nuclei of the cerebral cortex
  - B. Neuronal nuclei of the cerebellar Purkinje cells
  - C. Neuronal nuclei of spinal cord grey matter
  - D. Neuronal nuclei of the hippocampus
  - E. Neuronal perikaryon of the cerebral cortex
  
2. What organ serves as the primary site of Porcine circovirus-2 replication in fetal pigs?
  - A. Cerebrum
  - B. Heart
  - C. Kidney
  - D. Lung
  - E. Liver
  
3. All of the following findings are associated with Porcine circovirus infection in the kidney EXCEPT:
  - A. Membranoproliferative glomerulonephritis
  - B. Regenerative tubular epithelium
  - C. Lymphoplasmacytic interstitial nephritis
  - D. Granulomatous interstitial nephritis
  - E. Necrosis of tubular epithelium
  
4. All of the following histologic features are associated with rupture of abdominal artery aneurysm in dairy cattle EXCEPT:
  - A. A thin tunica media
  - B. Fragmented and coiled elastin
  - C. Granulation tissue and hemorrhage at site of rupture
  - D. A thin tunica intima with thinning of underlying smooth muscle proximal and distal to site of rupture
  - E. Mucinous change and mineralization of the tunica media proximal and distal to site of rupture
  
5. Copper deficiency in pigs causes:
  - A. Osteopetrosis
  - B. Osteosclerosis
  - C. Cortical hyperostosis
  - D. Osteoporosis
  - E. Osteochondromatosis
  
6. Sheep with which of the following alleles are most susceptible to infection with scrapie:
  - A. ARQ
  - B. ARR
  - C. AHQ
  - D. VRQ
  - E. ARH
  
7. All of the following belong to the genus pestivirus, EXCEPT:
  1. Bovine viral diarrhea virus
  2. Porcine respiratory and reproductive syndrome virus
  3. Border disease virus
  4. Classical swine fever virus

5. Foot and mouth disease virus

- A. 1, 3, and 5 only
- B. 2 and 5 only
- C. 1, 3, and 5 only
- D. 1, 2, and 4 only
- E. 2, 3, and 5 only

8. Which of the following tissues is the primary location for zygomycotic granulomatous lymphadenitis in feedlot cattle:

- A. Mediastinal lymph node
- B. Submandibular lymph node
- C. Mesenteric lymph node
- D. Cervical lymph node
- E. None of the above

9. In caprine abortions and stillbirths due to infection with bovine viral diarrhea virus (BVDV), BVDV antigen is detected in all of the following tissues, EXCEPT:

- A. Heart
- B. Thymus
- C. Spleen
- D. Placenta
- E. Brain

10. The most consistent gross lesion with inherited rickets in Corriedale sheep is:

- A. Persistent island of cartilage in femoral metaphyses
- B. Focal to segmental thickening of the distal radial physis
- C. Metaphyseal hemorrhage
- D. Asymmetrical physeal growth
- E. Scapular supraglenoid tubercle exostoses

11. The primary target organs of *Clostridium perfringens* Type D enterotoxemia in cattle are:

- 1. Small intestine
  - 2. Brain
  - 3. Lungs
  - 4. Colon
- A. 1 and 4 only
  - B. 1, 2, and 3 only
  - C. 2 and 3 only
  - D. 1 and 3 only
  - E. 2, 3, and 4 only

12. Which of the following is the main histopathologic finding in Somatic Cell Nuclear Transfer (SCNT) placentae of ruminants is:

- A. Reduced vascular development
- B. Hypoplasia of trophoblastic epithelium
- C. Reduced numbers of trophoblastic binucleate cells
- D. Marked increase in placental binucleate cells
- E. Enlarged placentomes

13. The neurologic lesions of equine trypanosomiasis due by *Trypanosoma evansi* are most severe in:

- A. The white matter of the spinal cord
  - B. The gray matter of the cerebrum
  - C. The white matter of the cerebellum
  - D. The white matter of the cerebrum
  - E. The Purkinje cells of the cerebellum
14. What is the most important histopathologic feature in the diagnosis of epithelioid variants of hemangiosarcoma in horses?
- A. Formation of branching tubules and micropapillae with vascular luminae
  - B. Luminal papilliferous projections of endothelial cells
  - C. Plump endothelial cells that form prominent (hobnail) luminal projections
  - D. Intracytoplasmic vacuoles that displace the nucleus and contain a single erythrocyte
  - E. Solid growth pattern with small vasoformative structures
15. In cattle, histologic lesions of intoxication with *Sida carpinifolia* (Malvaceae) manifest in all of the following, EXCEPT:
- A. Thyroid follicular epithelium
  - B. Cerebellar Purkinje cells
  - C. Pancreatic islet cells
  - D. Pancreatic acinar cells
  - E. Trigeminal ganglion neurons
16. The target organs of *Tetrapterys multiglandulosa* (Malpighiaceae) intoxication in aborted fetuses and newborn lambs include:
- 1. Kidney
  - 2. Liver
  - 3. Heart
  - 4. Brain
- A. 1 only
  - B. 1 and 2 only
  - C. 3 only
  - D. 3 and 4 only
  - E. 1, 2 and 4 only
17. The characteristic microscopic lesion in the intestine in bovine viral diarrhea is:
- A. Syncytia
  - B. Villar blunting and fusion
  - C. Destruction of crypt epithelium
  - D. Surface epithelial degeneration and necrosis
  - E. Eosinophilic intranuclear inclusions within epithelium
18. Eastern equine encephalitis virus in horses causes:
- A. Leukoencephalomalacia
  - B. Nigropallidal encephalomalacia
  - C. Necrosis and inflammation in the cortical gray matter
  - D. Nonsuppurative necrotizing vasculitis of the brain stem and spinal cord
  - E. Nonsuppurative encephalomyelitis in the brain stem and thoracolumbar spinal cord

19. Repetitive exposure to pyrrolizidine alkaloids in ruminants causes:

- A. Megalocytosis
- B. Centrilobular necrosis
- C. Individualization of hepatocytes
- D. Hepatocellular atrophy with regenerative nodules
- E. A & D

20. The cause of jowl abscesses in swine is:

- A. Mycoplasma suis
- B. Streptococcus suis
- C. Mycobacterium avium
- D. Streptococcus porcinus
- E. Erysipelothrix rhusiopathiae

21. Which of the following are NOT characteristics of Clostridium perfringens type D enterotoxemia in goats:

- i. Perivascular proteinaceous edema of brain (microangiopathy)
  - ii. Fibrinohemorrhagic colitis
  - iii. Herniation of the cerebellar vermis
  - iv. Focal symmetrical encephalomalacia of cerebellar peduncles
  - v. Pulpy kidney
- A. i
  - B. i, ii
  - C. i, ii, iii
  - D. i, ii, iii, iv
  - E. i, ii, iii, iv, v

22. Which of the following is the only gross lesion induced by ingestion of *Ipomoea carnea* subsp *fistulosa* in goats:

- A. Muscle atrophy and pallor
- B. Dilatative cardiomegaly
- C. Hypertrophied cardiomegaly
- D. Cardiac Infarction
- E. Aortic necrosis

23. Which of the following species is *Clostridium difficile* a significant pathogen in neonates:

- A. Pigs
- B. Hamsters
- C. Cattle
- D. Goats
- E. Dogs

24. Ingestion of avocado tree leaves in the goat causes:

- i. Endocardial hemorrhage
- ii. Cirrhosis
- iii. Scrotal edema
- iv. Swollen edematous mammary glands

- A. i, ii
- B. ii, iii
- C. ii, iv
- D. iii, iv
- E. i, iv

25. A majority of cases of Equine Polysaccharide storage myopathy (PSSM) are due to a mutation in what gene:

- A. AMP kinase
- B. Glycogen synthase 1
- C. Phosphofructokinase
- D. Phosphoglycerate mutase
- E. Myophosphorylase