

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 physal 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 *Tetrapteryx 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