

**2017 Veterinary Science CDE
Written Exam KEY**

1. What is removed when “cleaning a cow”? (R396)
AS.04.02.03.a Identify and summarize genetic defects that affect animal performance
 - a. **Retained placenta from uterus**
 - b. Nail from hoof wall
 - c. Crabapple from esophagus
 - d. Feces from rectum

2. Which of the following is not a role of sodium? (W128)
AS.03.02.02.c Select and utilize animal feeds based on nutritional requirements, using rations for maximum nutrition and optimal economic production.
 - a. Nerve transmission
 - b. Fluid regulation
 - c. Acid-base balance
 - d. **Hemoglobin formation**

3. Which heart chamber has the thickest wall? (L&B59)
AFNR AS.06.02.03.b Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.
 - a. Right atrium
 - b. Left atrium
 - c. Right ventricle
 - d. **Left ventricle**

4. Which term describes a hypersensitivity reaction involving pruritis with secondary dermatitis? (R211)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
 - a. Abrasion
 - b. Abscess
 - c. Alopecia
 - d. **Atopy**

5. What part of the eye contains rods and cones? (L&B152)
AFNR AS.06.02.03.b Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.
 - a. **Retina**
 - b. Sclera
 - c. Iris
 - d. Pupil

6. A producer calls you because his cow is in labor and he can see “the bag of waters.” What is he seeing? (R250)
AFNR AS.04.01.01.b Analyze the functions of major organs in the male and female reproductive systems.
- a. Umbilical cord
 - b. Chorion
 - c. **Amniotic sac**
 - d. Caruncles
7. Copper toxicity most affects what organ? (W131)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- a. Kidney
 - b. **Liver**
 - c. Intestines
 - d. Uterus
8. Which is not a characteristic of a reptile’s heart? (W381)
AFNR AS.06.02.03.b Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.
- a. Three chambers
 - b. No atria
 - c. Associated with a low metabolic rate, so reptiles depend on their environment for warmth
 - d. **Two ventricles**
9. Which clinical sign is associated with diabetes mellitus? (R231)
AFNR AS.06.03.01.a Identify and summarize how an animal’s health can be affected by anatomical and physiological disorders
- a. Drinking less frequently
 - b. **Urinating more frequently**
 - c. Gaining weight
 - d. Increased stool
10. The horse is a monogastric animal that can still digest grass. What organ makes this possible? (L&B113)
AFNR AS.03.01.02.b Analyze and apply information from a feed label and feeding directions to feed animals
- a. Stomach
 - b. Salivary gland
 - c. Small intestine
 - d. **Cecum**

11. Which gland secretes epinephrine and norepinephrine? (R229)

AFNR AS.06.03.02.a Evaluate an animal against its optimal anatomical and physiological characteristics

- a. **Adrenal gland**
- b. Thyroid gland
- c. Sebaceous gland
- d. Pituitary gland

12. Pacing, inability to settle, and self-mutilation are least likely to be clinical signs of what? (TVP May/June 2017)

AFNR AS.02.01.03.b Analyze and document animal husbandry practices and their impact on animal welfare

- a. Storm phobia
- b. **Hypothyroidism**
- c. Separation anxiety
- d. Confinement distress

13. What is not a characteristic of periosteum? (L&B33)

AFNR AS.06.02.03.b Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.

- a. Provides cells necessary to repair damage
- b. **Found at the ends of bones in the joints**
- c. Thin layer of connective tissue
- d. Connects tendons and ligaments to bones

14. What organ is not part of the lymphatic system? (R318)

AFNR AS.06.02.03.b Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.

- a. Lymph nodes
- b. Tonsils
- c. Spleen
- d. **Gallbladder**

15. What is another name for milk fever? (L&B26)

AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.

- a. Hyperkalemia
- b. Hypercalcemia
- c. Hypokalemia
- d. **Hypocalcemia**

16. What should an owner avoid when managing a pet with separation anxiety? (TVP May/June 2017)
AFNR AS.02.01.02.b Analyze and document animal welfare procedures used to ensure safety and maintain low stress when moving and restraining animals
- Food toys
 - Music
 - Shock collar**
 - White noise machine
17. What hormone controls circadian rhythm? (R230)
AFNR AS.06.03.02.a Evaluate an animal against its optimal anatomical and physiological characteristics
- Estrogen
 - Melatonin**
 - Thyroxine
 - Calcitonin
18. What is the process of bringing up food material from the stomach to the mouth for further chewing? (R117)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- Mastication
 - Rumination**
 - Defecation
 - Eructation
19. Which animal is a carnivore? (L&B103)
AFNR AS.06.01.01.b Explain how animals are classified using a taxonomic classification system
- Cat**
 - Rabbit
 - Horse
 - Goat
20. Which infectious disease could be so devastating to the poultry industry that veterinarians must report suspected cases to the appropriate authorities? (W478)
AFNR AS.07.02.01.a Summarize the importance of biosecurity to the animal industry
- Newcastle disease**
 - Trichomoniasis
 - Bumblefoot
 - Pasteurellosis

21. What is one reason why large breed puppies should eat large breed puppy food? (F108, repeat 2016)
AFNR AS.03.01.01.c Assess nutritional needs for an individual animal based on its growth stage and production system
- a. **It has a higher calcium level to reduce the risk of bone deformities.**
 - b. The kibble is larger which decreases the choking hazard.
 - c. It is more energy dense to support rapid growth.
 - d. Large breed puppies require a different set of nutrients than small breed puppies.
22. Which organ is located in the retroperitoneal space? (R142)
AFNR AS.06.02.03.b Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.
- a. Stomach
 - b. Liver
 - c. **Kidney**
 - d. Pancreas
23. Cats are at risk of developing hepatic lipidosis after a prolonged period of what? (R368, repeat 2016)
AFNR AS.06.03.01.a Identify and summarize how an animal's health can be affected by anatomical and physiological disorders
- a. Excess drinking
 - b. Restricted exercise
 - c. Antibiotic use
 - d. **Anorexia**
24. Which infectious disease do mosquitoes transmit to horses? (R389)
AFNR AS.07.02.01.a Summarize the importance of biosecurity to the animal industry
- a. **West Nile virus**
 - b. Potomac horse fever
 - c. Strangles
 - d. Equine protozoal myelitis
25. What is the term used to describe the birthing process in swine? (R99)
AFNR AS.04.01.01.b Analyze the functions of major organs in the male and female reproductive systems.
- a. **Farrowing**
 - b. Freshening
 - c. Kidding
 - d. Kindling

26. Which of the following terms will turn a buck into a wether? (R100&257)
AFNR AS.04.01.01.b Analyze the functions of major organs in the male and female reproductive systems.
- a. Ostectomy
 - b. Oophorectomy
 - c. **Orchidectomy**
 - d. Ovariohysterectomy
27. What does a mast cell tumor produce? (L&B324)
AFNR AS.06.03.02.a Evaluate an animal against its optimal anatomical and physiological characteristics
- a. Antioxidant
 - b. **Histamine**
 - c. Struvite
 - d. Chloride
28. Floating the teeth should be part of a wellness plan for which animal? (L&B208)
AFNR AS.05.01.02.c Select, use and evaluate equipment, technology and handling procedures to enhance sustainability and production efficiency
- a. Cattle
 - b. Goats
 - c. **Horses**
 - d. Swine
29. What is the gelatinous center of an intervertebral disc? (R272)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- a. **Nucleus pulposus**
 - b. Cauda equine
 - c. Annulus fibrosis
 - d. Transverse process
30. What is another name for a blood clot? (R177)
AFNR AS.06.03.01.a Identify and summarize how an animal's health can be affected by anatomical and physiological disorders
- a. Fibroid
 - b. Neoplasia
 - c. Lipoma
 - d. **Thrombus**

31. Hand raising this male animal can lead to dangerously aggressive behavior known as Berserk Male Syndrome. (R404)
AFNR AS.02.01.03.b Analyze and document animal husbandry practices and their impact on animal welfare
- Goat
 - Parrot
 - Hamster
 - Llama**
32. Which birthing presentation is generally considered “normal” in swine but not cattle? (R252)
AFNR AS.04.02.03.b Evaluate reproductive problems that occur in animals
- Cranial
 - Caudal**
 - Transverse
 - Breech
33. Which diagnostic test is used to determine the presence of mange mites? (R211)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- Skin scraping**
 - Fluorescien dye
 - Excisional biopsy
 - Intradermal skin testing
34. Which term means a slower than normal heart rate but normal rhythm? (L&B63)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- Bradycardia**
 - Tachycardia
 - Myocardia
 - Pericardia
35. Which illness causes the body to destroy its own cells? (L&B69)
AFNR AS.06.03.01.a Identify and summarize how an animal’s health can be affected by anatomical and physiological disorders
- Cystitis
 - Pneumonia
 - Autoimmune disease**
 - Pyoderma

36. Which disease is zoonotic and transmitted via direct contact of contaminated water and soil? (F200, repeat 2014)
AFNR AS.07.02.02.b Analyze the health risk of different zoonotic diseases to humans and identify prevention methods
- a. Parvovirus
 - b. Q Fever
 - c. Brucellosis
 - d. Leptospirosis**
37. Which procedure can help determine whether or not an animal has glaucoma? (R294&296)
AFNR AS.07.01.01.c Select and use tools and technology to meet specific animal health management goals
- a. Fluorescein stain
 - b. Tonometry**
 - c. Conjunctival scrape
 - d. Schirmer tear test
38. Enteritis is probably the most common cause of death in rabbits. What part of the body is inflamed with this group of diseases? (W267)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- a. Upper respiratory tract
 - b. Urinary tract
 - c. Intestinal tract**
 - d. Reproductive tract
39. A difficult birth is called (R253)
AFNR AS.04.02.03.b Evaluate reproductive problems that occur in animals
- a. Dysplasia
 - b. Dementia
 - c. Diestrus
 - d. Dystocia**
40. Hyperventilation may lead to a decrease in what? (R192)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- a. Respiratory rate
 - b. Blood pH
 - c. Carbon dioxide levels in blood**
 - d. Metabolism

41. A producer vaccinates his sheep with tetanus antitoxin at the time of banding. What is true about the protection of an antitoxin? (L&B 182, repeat 2016)
AFNR AS.07.01.01.c Select and use tools and technology to meet specific animal health management goals
- a. The animal develops an active immunity against the bacterium.
 - b. It provides long-term protection.
 - c. It requires a booster vaccine in a month.
 - d. **The benefit starts immediately after the injection.**
42. Which bacterium is the causative agent for “over-eating disease”? (F235, repeat 2015)
AFNR: AS.03.03.03.b Analyze technologies used to provide animal nutrition and summarize their potential benefits and consequences
- a. *Clostridium chauvoei*
 - b. ***Clostridium perfringens***
 - c. *Clostridium septicum*
 - d. *Clostridium tetani*
43. Which clinical sign is associated with congestive heart failure? (R174)
AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.
- a. **Ascites**
 - b. Halitosis
 - c. Hyperthermia
 - d. Stranguria
44. What would be given to help kill roundworms in a puppy? (R354)
AFNR AS.07.01.04.b Research and analyze data to evaluate preventative measures for controlling and limiting the spread of diseases, parasites, and disorders among animals
- a. **Anthelmintic**
 - b. Antiemetic
 - c. Antipruritic
 - d. Antiseptic
45. Minimizing stress, especially in production animals, can help prevent disease. Which is the least likely to cause an animal enough stress to cause disease? (L&B 242-243)
AFNR AS.02.01.02.b Analyze and document animal welfare procedures used to ensure safety and maintain low stress when moving and restraining animals.
- a. Warm and humid barn
 - b. Transport to a livestock show
 - c. **Moving animals from feedlot to pasture**
 - d. Feeding twice the normal grain ration

46. What is true about a cutting needle? (R361)

AFNR AS.07.01.05.b Assess the safety and effectiveness of facilities and equipment used for surgical and nonsurgical veterinary treatments and procedures

- a. It pierces, not cuts, through tissue.
- b. It should be used for delicate tissue.
- c. It doesn't come in swaged form.
- d. There are typically 2-3 sharp edges.**

47. Which is a tick-borne disease that causes a “bull’s-eye ” skin lesion, flu-like symptoms, and potentially organ damage? (W23)

AFNR AS.07.02.02.b Analyze the health risk of different zoonotic diseases to humans and identify prevention methods

- a. Anaplasmosis
- b. Lyme disease**
- c. Erlichiosis
- d. Rocky Mountain Spotted Fever

48. An equine patient is undergoing surgery for an intestinal volvulus. Which of the following will the surgeon perform after removing a section of dead bowel? (R128-129)

AFNR AS.07.01.05.b Assess the safety and effectiveness of facilities and equipment used for surgical and nonsurgical veterinary treatments and procedures

- a. Cystocentesis
- b. Abomasopexy
- c. Anastomosis**
- d. Castration

49. A nephrolith is a stone located in which organ? (R149)

AFNR AS.06.03.02.a Evaluate an animal against its optimal anatomical and physiological characteristics

- a. Gallbladder
- b. Pancreas
- c. Duodenum
- d. Kidney**

50. Which treatment would not be considered when first managing feline hyperthyroidism? (L&B168)

AFNR AS.07.01.03.b Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites, and physiological disorders.

- a. Thyroid supplementation**
- b. Radioactive iodine
- c. Surgical excision
- d. Thyroxine blocker

