



Veterinary Science Career Development Event

Created: Feb-20

MULTIPLE CHOICE

1. Proper ventilation in a closed animal facility is important for all of the following except:
- a. fresh oxygen
 - b. flushing out microbes
 - c. allows proper lighting
 - d. removes head

ANS: C

Veterinary Science Preparatory training for the veterinary assistant
Floron C. Faries, Jr., DVM, MS 2011
p. 46

2. Bone types include:
- a. long, short, irregular, and flat
 - b. long, short, irregular, and round
 - c. long, short, regular, and flat
 - d. long, short, regular, and round

ANS: A

Veterinary Science Preparatory training for the veterinary assistant
Floron C. Faries, Jr., DVM, MS 2011
p. 55

3. The scientific name for the dog species is:
- a. *Canis lupus*
 - b. *Canis familiaris*
 - c. *Canis domestica*
 - d. *Canis carnivora*

ANS: B

Veterinary Science Preparatory for the veterinary assistant
Floron C. Faries, Jr., DVM, MS 2011
p. 83

4. Which of the following is not a major mineral?
- a. Iron
 - b. Calcium
 - c. Potassium
 - d. Chloride

ANS: A

Veterinary Science Preparatory for the veterinary assistant
Floron C. Faries, Jr., DVM, MS 2011
p.102

5. Which of the following is the most common kind of restraint:
- a. psychological
 - b. physical
 - c. chemical
 - d. hypnosis

ANS: B

Veterinary Science Preparatory for the veterinary assistant
Floron C. Faries, Jr., DVM, MS 2011
p. 114

6. All of the following are true about rabies except:
- a. it is caused by a virus
 - b. is also known as hydrophobia
 - c. only occurs in mammals
 - d. can be treated with antibiotics

ANS: D

Veterinary science prep for the vet assistant
Floron C. Faries, Jr., DVM, MS 2011
p. 205

7. Dermatitis is the inflammation of the
- a. skin
 - b. muscle
 - c. lungs
 - d. intestines

ANS: A

Veterinary science prep for the vet assistant
Floron C. Faries Jr., DVM, MS 2011
p. 229

8. The most essential part of every animal's diet is
- a. fats
 - b. carbohydrates
 - c. vitamins
 - d. water

ANS: D

Veterinary science prep for the vet assistant
Floron C. Faries Jr., DVM, MS 2011
p. 241

9. The prefix _____ means away from
- a. ad-
 - b. ab-
 - c. ex-
 - d. endo-

ANS: B

Veterinary medical terminology
p. 7

10. The term for a lack of development of an organ or tissue or a cell
- a. aplasia
 - b. hypoplasia
 - c. neoplasia
 - d. anaplasia

ANS: A

Medical Terminology
p. 27

11. An example of a mesocephalic dog breed is
- a. pug
 - b. collies
 - c. greyhounds
 - d. labrador

ANS: D

medical terminology
p. 46

12. Which type of fracture has an angular break diagonal to the long axis?
- a. greenstick
 - b. comminuted
 - c. oblique
 - d. transverse

ANS: C

Medical terminology

p. 59

13. When bones abnormally bend out without breaking, it is known as
- a. valgus
 - b. varus
 - c. transverse
 - d. avulsion

ANS: A

veterinary medical terminology

Romich 3rd

p.59

14. During molting, hens will decrease egg production because their bodies are depleted of
- a. fiber
 - b. Vitamin E
 - c. Zinc
 - d. Calcium

ANS: D

veterinary assisting fundamentals and applications

Vanhorn & Clark p. 351

15. Controlled substances are kept in a locked cabinet and are regulated by
- a. IACUC
 - b. DEA
 - c. FDA
 - d. AWA

ANS: B

veterinary assisting fundamentals and applications

Vanhorn and Clark p.599

16. Medical record includes all of the following except:
- a. SOAP
 - b. consent forms
 - c. POVMR
 - d. OSHA

ANS: D

McCurnins 8th chapter 3

17. Most human directed aggression in dogs is
- a. dominance
 - b. from abuse
 - c. fear related
 - d. breed related

ANS: C

McCurnins 8th p.149

18. Abnormal respiratory sounds include all the following except
- a. wheezes
 - b. gurgling
 - c. crackles
 - d. murmurs

ANS:D

McCurnins p.251

19. Protein, fats, and _____ are nutrients that supply energy.

- a. water
- b. carbohydrates
- c. fiber
- d. vitamins

ANS: B

McCurnins 8th p. 293

20. The average gestation length of a female cat is

- a. 45 days
- b. 65 days
- c. 55 days
- d. 75 days

ANS: B

McCurnins 8th p. 380

21. Increased serum glucose may indicate all of the following except:

- a. Addison's disease
- b. excitement
- c. diabetes mellitus
- d. stress

ANS: A

McCurnin's 8th p. 425

22. _____ media blank are media that prevent the growth of some types of organisms and are used to facilitate isolation of organisms from mixed cultures.

- a. enrichment
- b. differential
- c. selective
- d. transport

ANS: C

McCurnins 8th p.495

23. Treatment for feline heartworm disease includes:

- a. adulticide
- b. microfilaricide
- c. both a and b
- d. there is no safe and effective treatment

ANS: D

McCurnins 8th p. 688

24. Illnesses in neonate patients that require immediate attention include all of the following except:

- a. hypothermia
- b. dehydration
- c. weight loss
- d. hypoglycemia

ANS: C

McCurnins 8th p. 793

25. All of the following are examples of holistic medicine except:

- a. rehabilitation
- b. chiropractic
- c. acupuncture
- d. vaccines

ANS: D

McCurnins 8th p.846

26. There are some drugs that are safe to deliver through and endotracheal tube in an emergency situation. They are easily remembered through the acronym *NAVEL*. The “A” stands for:

- a. atropine
- b. acetaminophen
- c. acepromazine
- d. atipamezole

ANS: atropine

McCurnins 8th p. 925

27. Anesthesia is induced rapidly in what species?

- a. cats
- b. horses
- c. dogs
- d. pigs

ANS: B

McCurnins 8th p.1119

28. Absorbable suture lose most of their breaking strength within _____ days.

- a. 30
- b. 60
- c. 90
- d. 120

ANS: B

McCurnins 8th p. 1202

29. _____ are believed to be the first domesticated animals.

- a. Cat
- b. Dog
- c. cow
- d. horse

ANS: B

Small animal care and mng p. 5

30. _____ investigate diseased tissue in humans and animals.

- a. Geneticists
- b. Cytologists
- c. zoologists
- d. histopathologists

ANS: D

Small animal care and mng p. 87

31. The _____ regulates the commercial pet food industry and ensures that foods are uniformly labeled and marketed.

- a. AAFCO
- b. OSHA
- c. USDA
- d. IACUC

ANS: A

Small animal care and mng p. 173

32. _____ in dogs cause a cloudy, white opacity of the lens. This disease may be hereditary or nonhereditary and usually cause blindness when fully developed.

- a. glaucoma
- b. retinal atrophy
- c. cataracts
- d. corneal abrasions

ANS: C

Small animal care and mng p. 187

33. _____, also referred to as feline infectious enteritis or cat distemper, is caused by a parvovirus or DNA virus.

- a. Panleukopenia
- b. Rhinotracheitis
- c. Calicivirus
- d. Pneumonitis

ANS: A

Small animal care and mng p. 231

34. The Boston terrier is considered part of what AKC group?

- a. Toy
- b. Terrier
- c. Non-Sporting
- d. Herding

ANS: C

Small animal care and mng p. 164

35. Correct rabbit restraint is important because when frightened they can kick hard enough to fracture it's

- a. foot
- b. tibia
- c. radius
- d. spine

ANS: D

Small animal care and mng p. 267

36. The most important disease is hamster enteritis, also referred to as _____

- a. snuffles
- b. parvo
- c. scours
- d. wet tail

ANS: D

Small animal care and mng p. 285

37. _____ species of rat was the major reservoir for the black plague that killed more than one-fourth of the European population during the 1300's.

- a. *Rattus rattus*
- b. *Rattus auratus*
- c. *Rattus norvegicus*
- d. *Rattus unguiculatus*

ANS: C

Small animal care and mng p. 300

38. _____ are known as the powerhouse of the cell.

- a. lysosomes
- b. endoplasmic reticulum
- c. golgi apparatus
- d. mitochondria

ANS: D

Intro to veterinary science p. 7

39. Tendons connect _____ to _____.

- a. muscle; bone
- b. bone; bone
- c. muscle; muscle
- d. muscle; ligaments

ANS: A

Intro to vet science p.23

40. Tachycardia describes a _____ heart rate.

- a. fast
- b. normal
- c. slow
- d. non existent

ANS: A

Intro to vet science p. 63

41. What controls the normal rate of respiration?

- a. carbon dioxide
- b. lungs
- c. oxygen
- d. brain

ANS: D

Intro to vet science p. 78

42. What species of animal has lobulated kidneys?

- a. cat
- b. horse
- c. dog
- d. cow

ANS: D

Intro to vet science p. 86

43. _____ is hardest substance in the body.

- a. dentin
- b. bone
- c. enamel
- d. cementum

ANS: c

intro to vet science p. 103

44. How many cranial nerves are in the central nervous system of a dog?

- a. 4
- b. 8
- c. 12
- d. 16

ANS: C

Intro to vet science p. 149

45. Lack of vitamin D prevents normal absorption of calcium and prevents adequate deposition in the bone. If this deficiency occurs in the young it results in a condition known as:

- a. rickets
- b. Addison's disease
- c. brittle bone
- d. Cushing's disease

ANS: A

Intro to vet science p. 167

46. Removing the sharp edges of a horse's teeth is called _____

- a. filing
- b. trimming
- c. floating
- d, curetting

ANS: C

Intro to vet science p. 208

47. Inanimate objects that can facilitate the transfer of diseases are known as _____ (example: water or feed troughs)

- a. eukaryotes
- b. fomites
- c. prokaryotes
- d. vector

ANS: B

Intro to vet science p. 218

48. What causes ringworm?

- a. fungi
- b. prions
- c. bacteria
- d. worms

ANS: A

Intro to vet science p. 226

49. All of the following are examples of zoonotic diseases except:

- a. cutaneous larva migrans
- b. toxoplasmosis
- c. Mad cow disease
- d. Johne's disease

ANS: D

Intro to vet science p. 266-271

50. _____ is the procedure in which all microorganisms are destroyed.

- a. disinfection
- b. sanitizing
- c. sterilization
- d. cleaning

ANS: C

Intro to vet science p. 293

2021 National FFA Veterinary Science Career Development Event

Written Exam

1. Factors that contribute to stress in animals include all the following except
 - a. Overcrowding
 - b. Weather extremes
 - c. Access to food at all times**
 - d. TransportationIntro to animal sci p. 242
2. The estrous cycle in cattle is described as
 - a. Year round polyestrous**
 - b. Anestrous
 - c. Induced ovulators
 - d. Seasonally polyestrousIntro to Animal Sci p. 126
3. All the following parasites can be passed from one animal to another through fecal material except:
 - a. *Toxocara spp*
 - b. *Ancylostoma spp*
 - c. *Trichuris vulpis*
 - d. *Dirofilaria immitis***Intro to Animal Sci p. 228
4. When a bone is broken cleanly into two pieces it is known as a(an)
 - a. Simple fracture**
 - b. Compound fracture
 - c. Spiral fracture
 - d. Comminuted fractureIntro to Animal Sci p. 44
5. White blood cells are known as
 - a. Thrombocytes
 - b. Leukocytes**
 - c. Erythrocytes
 - d. PlasmaIntro to Animal Sci p. 54
6. Which option is the correct order of blood flow through the heart?
 - a. Right atrium, Right Ventricle, lungs, left atrium, left ventricle**
 - b. Left atrium, left ventricle, lungs, right atrium, right ventricle
 - c. Left atrium, right atrium, lungs, left ventricle, right ventricle
 - d. Right atrium, left atrium, lungs, right ventricle, left ventricle

Intro to Animal Sci p. 65

7. Normal heart rate for a dog is

- a. 58-86
- b. 300-600
- c. 23-70
- d. **100-130**

Intro to Animal Sci p. 65

8. Gas exchange in the lungs occurs in the

- a. **Alveoli**
- b. Bronchi
- c. Trachea
- d. Bronchioles

Intro to Animal Sci p. 77

9. Which species has lobulated kidneys

- a. Horses
- b. **Cows**
- c. Dogs
- d. Cats

Intro to Animal Sci p. 86

10. All the following are examples of zoonotic diseases except:

- a. Rabies
- b. Ringworm
- c. **Foot-and-mouth disease**
- d. Psittacosis

Small Animal Management and Care p. 12-14

11. Which of the following is not a fat-soluble vitamin?

- a. A
- b. D
- c. **C**
- d. K

Small Animal Management and Care p. 124

12. Ruminant animals have how many compartments to their stomachs?

- a. 1
- b. 2
- c. 3
- d. **4**

Small Animal Management and Care p. 132

13. Snuffles is an upper respiratory disease that effects what species?

- a. **Rabbits**
- b. Hamsters
- c. Gerbils
- d. Ferrets

Small Animal Management and Care p. 269

14. Which species is nocturnal?

- a. Rabbits
- b. **Hamsters**
- c. Gerbils
- d. Ferrets

Small Animal Management and Care p. 279

15. The life expectancy is of a gerbil is

- a. 1-3 years
- b. **2-4 years**
- c. 3-5 years
- d. 4-6 years

Small Animal Management and Care p. 293

16. A cavy is more commonly known as a _____.

- a. Ferret
- b. Hamster
- c. **Guinea pig**
- d. Gerbil

Small Animal Management and Care p. 319

17. Which species is used for hunting rodents and rabbits?

- a. Guinea pig
- b. Hamster
- c. **Ferret**
- d. Gerbil

Small Animal Management and Care p. 346

18. _____ receptors are responsible for the sense of smell.

- a. **Olfactory**
- b. Pharynx
- c. Nasal turbines
- d. Sinus

Vet Med term p. 188

19. A _____ is used to measure blood pressure.

- a. Otoscope

- b. Stethoscope
- c. **Sphygmomanometer**
- d. Pulse oximeter

Vet Med term p. 332

20. Fever or increase in body temperature can also be referred to all the following except:

- a. Febrile
- b. Pyrexia
- c. **Hypothermia**
- d. Hyperthermia

Vet Med term p. 331

21. Telescoping of one part of the intestines into an adjacent part is called

- a. Volvulus
- b. Diverticulum
- c. Parenchyma
- d. **Intussusception**

Vet Med term p. 131

22. Inflammation of the mouth is

- a. **Stomatitis**
- b. Orititis
- c. Dentitis
- d. Ositis

Vet Med term p. 131

23. The V-shaped pad of the soft horn between the bars on the sole of the equine hoof is known as the

- a. Sole
- b. White line
- c. Ergot
- d. **Frog**

Vet Med term p. 85

24. The correct order of the vertebral segments, from cranial to caudal, is

- a. Coccygeal, sacral, lumbar, thoracic, cervical
- b. Cervical, sacral, lumbar, thoracic, coccygeal
- c. **Cervical, thoracic, lumbar, sacral, coccygeal**
- d. Coccygeal, thoracic, lumbar, sacral, cervical

Vet Med term p. 65

25. Tarsal bones are found in the

- a. Digits
- b. Wrists

c. Stifles

d. **Hocks**

Vet Med term p. 67

26. Larger than normal red blood cells are described as being

a. Hyperchromic

b. Hypochromic

c. Microcytic

d. **Macrocytic**

Vet Med term p. 327

27. The type of roughage feed produced by fermenting chopped plant parts is

a. Concentrate

b. Sweet feed

c. **Silage**

d. Hay

Vet Med term p. 406

28. Veterinary Client Patient Relationship satisfies all the following criteria except:

a. The veterinarian has assumed responsibility of the patient regarding the health and veterinary treatment

b. The veterinarian is available for consultation

c. The veterinarian maintains medical records of the animals' treatments

d. **The veterinarian assumes responsibility of the patient's medical bills**

Veterinary Assisting p. 14

29. Medical records should be completed in

a. **Blue or black ink**

b. Red ink

c. Pencil so it can be easily corrected

d. Any color inks

Veterinary Assisting p. 19

30. If an error is made in a medical record, how should it be corrected?

a. White out or correction fluid

b. Erase it

c. **Place a single line through it**

d. Scribble over it so it can't be read

Veterinary Assisting p. 20

31. In order to use the title veterinary technologist, one must

a. Obtain an associate degree from an AVMA accredited school and pass the VTNE

b. **Obtain a bachelor's degree from an AVMA accredited school and pass the VTNE**

- c. Obtain a job at a veterinary clinic
 - d. Complete an online certificate program
- Veterinary Assisting p. 49

32. Interpersonal communications include all the following forms of communication except:

- a. Written
- b. Verbal
- c. Body language
- d. **Assumptions**

Veterinary Assisting p. 66

33. Veterinary laws are based on:

- a. **Each states Veterinary Practice Act**
- b. AAHA
- c. OSHA
- d. NAVLE

Veterinary Assisting p. 81

34. When selecting a pet all the following should be considered before deciding except:

- a. Age of pet
- b. Size of pet
- c. Space required for the pet
- d. **How many "likes" will it get on social media**

Veterinary Assisting p. 94

35. A senior dog should be fed which type of diet?

- a. Moderate protein, calcium, and phosphorus
- b. Low fat, low calorie, low protein
- c. Low protein, moderate calcium and phosphorus
- d. **High phosphorus, high calcium, moderate protein**

Veterinary Assisting p. 94

36. Lateral recumbency is a form of

- a. Chemical restraint
- b. Vocal restraint
- c. **Physical restraint**
- d. Not a real form of restraint

Veterinary Assisting p. 98

37. What size clipper blade is used for surgical prep?

- a. **40**
- b. 15
- c. 10
- d. 5

38. The term ovariohysterectomy is commonly defined as

- a. Castration
- b. **Spay**
- c. De-claw
- d. Tail docking

Veterinary Assisting p. 116

39. When creating a regular aquarium maintenance schedule how often should the water and pH levels be checked?

- a. Daily
- b. **Weekly**
- c. Monthly
- d. Quarterly

Veterinary Assisting p. 223

40. Sheep are primarily raised for all the following except

- a. Meat
- b. Milk
- c. Wool
- d. **Companions**

Veterinary Assisting p. 326

41. What equipment is used to separate blood cells from the liquid portion of blood?

- a. **Centrifuge**
- b. Sphygmomanometer
- c. refractometer
- d. hemocytometer

Veterinary Assisting p. 415

42. Proglottids found in a dog's feces is a common sign of what intestinal parasite?

- a. ***Dipylidium caninum***
- b. *Toxocara canis*
- c. *Toxascaris leonina*
- d. *Trichuris vulpis*

McCurnins p. 446

43. Which form of yeast is most commonly found in patients with ear infections?

- a. ***Malassezia pachydermatis***
- b. *Candida albicans*
- c. *Coccidioides immitis*
- d. *Cryptococcus neoformans*

McCurnins p. 510

44. On the 5-point Body Condition Scale guide a score of 5 is considered

- a. Very thin
- b. Ideal
- c. Overweight
- d. **Obese**

McCurnins p. 321

45. It is recommended wellness visits should be scheduled every _____ months for senior and geriatric dogs and cats.

- a. 3
- b. **6**
- c. 9
- d. 12

McCurnins p.262

46. Which of the following is considered a core vaccine for feline patients?

- a. **Feline panleukopenia**
- b. Feline leukemia virus
- c. Feline immunodeficiency virus
- d. Bordetella bronchiseptica

McCurnins p. 266

47. Proteins are large molecules made up of chains of smaller compounds called

- a. Lipids
- b. Vitamins
- c. **Amino acids**
- d. Minerals

McCurnins p.293

48. _____ is the most energy demanding, stressful stage in a typical female dogs' life.

- a. Growth
- b. Gestation
- c. **Lactation**
- d. Weaning

McCurnins p. 324

49. The most common route for administering vaccines in cats and dogs is

- a. IV
- b. ID
- c. IN
- d. **SQ**

McCurnins p.589

50. Alternative veterinary therapies include all the following except

- a. Physical therapy
 - b. Acupuncture
 - c. **Antibiotics**
 - d. Nutraceuticals
- McCurnins p. 845

National FFA Written Exam KEY 2022

Book: Small Animal Care and Management

1. When bringing a ferret home the owner should
 - a. Start training immediately
 - b. Give the ferret time to adjust to its new environment**
 - c. Talk loudly to the ferret so it learns the owner's voice
 - d. Lock them in a room away from the rest of the householdp. 352
2. Which breed of cat has a complete lack of tail due to breed characteristics/standards?
 - a. Manx**
 - b. Ocicat
 - c. Bombay
 - d. Abyssinianp. 210
3. Which species nearly went extinct in the wild due to poachers trapping them for their pelts?
 - a. Ferrets
 - b. Rabbits
 - c. Chinchillas**
 - d. Guinea Pigsp. 332
4. All species of snakes fall into the family Boidae except:
 - a. Reticulated python
 - b. Anaconda
 - c. Boa constrictor
 - d. Corn snake**p. 396
5. Birds have four types of feathers. The purpose of the down feathers is
 - a. Insulation**
 - b. Assist with flight
 - c. Sensory
 - d. Provide the bird's colorp. 441
6. In fish, where is the caudal fin located?
 - a. On the back
 - b. On the side
 - c. On the belly
 - d. On the tail**p. 488

7. The typical average lifespan of a hedgehog is

- a. 1 year
 - b. 5 years**
 - c. 10 years
 - d. 30 years
- p. 544

8. Rabbits are used for all of the following except:

- a. Pets
 - b. Meat
 - c. Research
 - d. Hunting rodents**
- p. 242

9. The most abundant species of the hamsters are

- a. Golden hamsters**
 - b. Dwarf hamsters
 - c. European hamsters
 - d. Romanian hamsters
- p. 278

10. Which species communicates by standing upright and pounding their rear feet?

- a. Hamsters
 - b. Guinea pigs
 - c. Gerbils**
 - d. Ferrets
- p. 293

Book: Veterinary Assisting Fundamentals and applications

11. Which organization/association was developed for the exchange of information and humane care of laboratory animals used in research?

- a. AMA
 - b. AVMA
 - c. AALAS**
 - d. AWA
- p.255

12. Blood is composed of cells and plasma. Plasma is made up of all of the following proteins except:

- a. Albumin
- b. Globulin
- c. Fibrinogen
- d. Pepsin**

p.415

13. A female with a uterine infection where the uterus fills with purulent material (aka pus) is known as

- a. **Pyometra**
- b. Pyoderma
- c. Hyperplasia
- d. Brucellosis

p.455

14. Encephalitis is commonly called

- a. Blind staggers
- b. **Sleeping sickness**
- c. Cancer
- d. Bang's disease

p.509

15. Listening to the heart and lungs through a stethoscope is known as

- a. **Auscultation**
- b. Palpation
- c. Arrhythmia
- d. Observation

p.624

16. All of the following are included in the anatomy of a dog's toenail except

- a. Nailbed
- b. Quick
- c. Keratin
- d. **Epidermis**

p.679

17. Indicator strips/tape on/in a surgical pack are activated when

- a. Proper temperature has been reached
- b. Proper pressure has been reached
- c. Proper time has been reached
- d. **All of the above**

p. 791

18. A cat with extra toes is known as

- a. **Polydactyl**
- b. Teradactyl
- c. Polyphalanges
- d. Teraphalanges

p.123

Commented [SKW1]: Added purulent material

19. Llamas are bred for all of the following except

- a. Meat
 - b. Fiber
 - c. **Riding**
 - d. Packing
- p.239

20. All of the following are types of restraint used on a horse except

- a. Pinching
 - b. Hobbles
 - c. Twitching
 - d. **Nose tongs**
- p.288

21. The peripheral nervous system consists of the sensory somatic system and

- a. Plexus system
 - b. Accessory system
 - c. Automatic system
 - d. **Autonomic system**
- p. 148

22. Blood returns to the heart through the large vessel called the

- a. **Vena cava**
 - b. Ventricle
 - c. Coronary artery
 - d. Pulmonary vein
- p.59

Commented [SKW2]: Changed from vessels to vessel

23. _____ tissue is also referred to as fat.

- a. Corium
 - b. **Adipose**
 - c. Striated
 - d. Neuron
- p.23

24. Passive immunity is acquired by

- a. Vaccinations
 - b. Exposure to disease
 - c. **Transferred from one animal to another**
 - d. Preventatives
- p.181

25. The pituitary gland releases hormones that affect all of the following except

- a. **Blood pressure**

- b. Kidneys
 - c. Thyroid
 - d. Uterus
- p.163

26. All of the following are part of the six major components of animal diets except

- a. Water
 - b. Carbohydrates
 - c. **Probiotics**
 - d. Vitamins
- p. 190

Commented [SKW3]: Changed from animals to animal

27. Bacteria present in four shapes. Which of the following is rod shaped?

- a. Staphylocci
 - b. Streptococci
 - c. **Bacilli**
 - d. Spirochetes
- p.222

28. Ruminants are said to have four stomachs. All of the following are part of the ruminant's stomach except

- a. Abomasum
 - b. **Cecum**
 - c. Omasum
 - d. Reticulum
- p. 114

29. The crown of a cat's tooth is covered in _____, the hardest substance in the body.

- a. Cementum
 - b. Dentin
 - c. Pulp
 - d. **Enamel**
- p. 103

30. Alveoli, where gas exchange takes place in the lungs, are located at the end of the _____

- a. Trachea
 - b. Bronchus
 - c. **Bronchiole**
 - d. Cartilage ring
- p.76

Book: Vet Med Term

31. The pelt of an animal refers to the

- a. Fur
 - b. Skin
 - c. **Fur and skin**
 - d. None of the above
- p.207

32. Inflammation of the kidney is

- a. Nephrosis
 - b. Nephroptosis
 - c. **Nephritis**
 - d. Nephropathy
- p. 151

33. The “knee” in people is known as what in horses?

- a. Hock joint
 - b. Pastern joint
 - c. Coffin joint
 - d. **Stifle joint**
- p. 85

34. The surgical puncture to remove fluid from the abdomen is known as

- a. **Abdominocentesis**
 - b. Abomasopexy
 - c. Anastomosis
 - d. Enterostomy
- p.129

35. Below normal levels of oxygen in an animal is known as

- a. Infarct
 - b. **Hypoxia**
 - c. Hypocapnia
 - d. Thrombus
- p. 176

Commented [SKW4]: Changed Ischemia to Hyocapnia

36. The heat cycle in a female is known as

- a. Estrus cycle
 - b. **Estrous cycle**
 - c. Lactogenic cycle
 - d. Follicular cycle
- p. 258

37. A greenstick fracture is also known as a/an _____

- a. Open fracture
- b. Comminuted fracture

- c. Spiral fracture
 - d. Incomplete fracture**
- p. 58

38. The term that means towards the head is

- a. Medial
 - b. Rostral
 - c. Cranial**
 - d. Caudal
- p. 32

39. _____ is a sudden involuntary contraction of some muscles caused by a brain disturbance.

- a. Seizure**
 - b. Hydrocephalus
 - c. Hypnosis
 - d. Paralysis
- p. 279

40. Another term for ear wax is

- a. Choroid
 - b. Cerumen**
 - c. Pinna
 - d. Cornus
- p.303

Book: McCurnin's

41. The restraint method known as the tail jack is used in what species?

- a. Swine
 - b. Ovine
 - c. Canine
 - d. Bovine**
- p.204

42. Which fat soluble vitamin functions mainly in the blood clotting system:

- a. B3
 - b. B12
 - c. K**
 - d. C
- p. 301

43. The blood collection tube that has EDTA in it as an anticoagulant preserves cell morphology has what color top?

- a. Red

- b. **Purple**
 - c. Blue
 - d. Green
- p.399

44. The common name for *Toxocara canis* is

- a. Whipworm
 - b. Tapeworm
 - c. **Roundworm**
 - d. Hookworm
- p. 452

45. PPE such as lead aprons, gloves, and thyroid shields are required when taking radiographs (aka x-rays) to protect the veterinary staff from

- a. Heel effect
 - b. Anode
 - c. Cathode
 - d. **Scatter radiation**
- p. 523

46. Which type of injection is used to desensitize the skin with a local anesthetic or perform allergy skin testing

- a. **Intradermal**
 - b. Subcutaneous
 - c. Transdermal
 - d. Intravenous
- p. 588

47. A Coggins test is commonly used to detect which of the following, in horses?

- a. Equine Herpesvirus
 - b. Strangles
 - c. **Equine Infectious Anemia**
 - d. Colic
- p. 727

48. A _____ is used to relieve severe bloat in cattle in emergency situations.

- a. Hip lifters
 - b. **Trocar**
 - c. Cray hook
 - d. Hemostats
- p. 960

49. How often should an anesthetic machine be inspected and maintained by a trained service professional, to ensure it is operating properly?

Commented [SKW5]: Deleted "in", added radiographs

Commented [SKW6]: Rewrote question "Equine infectious anemia is more commonly referred to as" and updated answers to be more horse related

Commented [SKW7]: Rewrote to add clarity

- a. **At least once a year**
 - b. At least every two years
 - c. At least every three years
 - d. Never. They are built to never need maintenance
- p. 1097

50. Cats and dogs have a total of _____ incisors.

- a. 6
 - b. 7
 - c. **12**
 - d. 14
- p. 1302

2023 National FFA Veterinary Science CDE – Equine Workstream

1. At what age is a horse said to have a “full mouth”, having replaced all temporary teeth with permanent ones? (McCurnin 1157 10th edition)
 301. One year of age
 302. Three years of age
 - 303. Five years of age**
 304. Seven years of age
2. The layman’s term “wolf teeth” refers to which kind of tooth in the horse? (McCurnin 285 8th edition)
 305. Incisor
 306. Canine
 - 307. Premolar**
 308. Molar
3. What is the layman’s term for serious abdominal pain in the equine patient? (McCurnin 1405 8th edition)
 309. Lethargy
 - 310. Colic**
 311. Maldigestion
 312. Peritonitis
4. Situated primarily on the right side of the horse, what is the name of the blind-ended fermentation vat immediately after the ileum? ([Merck Veterinary Manual](#))
 313. Large colon
 314. Rumen
 315. Jejunum
 - 316. Cecum**
5. Which macronutrient is NOT primarily absorbed by the horses’ small intestine? ([Iowa State University Extension: Digestive Anatomy and Physiology of the Horse](#))
 - 317. Structural carbohydrates (dietary fiber)**
 318. Non-structural carbohydrates (starch)
 319. Protein
 320. Fat
6. What is the average gestational length in an adult horse? (McCurnin pg 328 10th edition)
 321. 240 days
 322. 290 days
 - 323. 340 days**
 324. 390 days

2023 National FFA Veterinary Science CDE – Equine Workstream

7. A horse is considered a(n) _____ species, due to the frequency of their estrous cycle(s). (McCurnin pg 328 10th edition)
- 325. Monestrous
 - 326. Diestrous
 - 327. Polyestrous**
 - 328. Induced ovulatory
8. A castrated male horse is called a(n) _____? (McCurnin pg 231 10th edition)
- 329. Mule
 - 330. Gelding**
 - 331. Stallion
 - 332. Steer
9. In what part of the mare's reproductive tract does embryonic implantation occur? (McCurnin Pg 333 10th edition)
- 333. Uterus**
 - 334. Cervix
 - 335. Ovary
 - 336. Vulva
10. During the parturition process in the mare, one would expect which of the following sequences to normally occur (from first to last): (McCurnin pg 333 10th edition)
- 337. Foal passes through birth canal, frequent urination, appearance of water bag.
 - 338. Appearance of water bag, placenta passed, foal passes through birth canal.
 - 339. Appearance of water bag, foal passes through birth canal, placenta passed.**
 - 340. Foal's front feet present, appearance of water bag, placenta passed.
11. A horse with a body condition score of 8 would likely have the following physical attributes: (McCurnin Pg. 279 10th edition)
- 341. Neck – noticeable thickening; Withers – fat beginning to be deposited
 - 342. Ribs – individual ribs can be felt; Back – slight (positive) crease down back
 - 343. Shoulders – blend smoothly into body; Ribs – fat over ribs fleshy/spongy
 - 344. Ribs – difficult to feel; Tailhead – fat around tailhead very soft**
12. Restraint with a mechanical twitch works by: (McCurnin p.195 8th edition)
- 345. Releasing endorphins**
 - 346. Creating pain as a distraction to the horse
 - 347. Using injectable sedatives
 - 348. Diversionary device

2023 National FFA Veterinary Science CDE – Equine Workstream

13. In horses' wounds can develop exuberant granulation tissue. This is commonly known as (McCurnin p.994 8th edition)
- 349. Necrotic tissue
 - 350. Healthy tissue growth
 - 351. Epithelialization
 - 352. Proud flesh
14. When treating a wound on a horse, of the following, what is the first step? (McCurnin p. 993 8th edition)
- 353. Apply antibiotic ointment
 - 354. Remove the hair from the edges of the wound
 - 355. Lavage the wound
 - 356. Debride the wound
15. When bandaging wounds, the secondary layer performs what function? (McCurnin p. 980n 8th edition)
- 357. Debridement
 - 358. Covers surgical incisions/wounds
 - 359. Provides support
 - 360. Protects epithelialization
16. Reactive airway disease in horses, recognized as causing difficulty in breathing, chronic cough, wheezing, and nasal discharge, is commonly known by horse owners as: (McCurnin pg. 619 10th Edition)
- 361. Thumps
 - 362. Hives
 - 363. Heaves
 - 364. Gasps
17. The normal resting respiratory rate for a mature, full-sized horse is: (McCurnin pg. 234 10th edition)
- 365. 28-36 breaths per minute
 - 366. 18-26 breaths per minute
 - 367. 8-16 breaths per minute
 - 368. 48-56 breaths per minute
18. The anatomical term for the large cartilaginous tube that connects the larynx to the bronchi of the lungs, and commonly known as the "windpipe" is known as: (McCurnin pg. 618 10th edition)
- 369. Esophagus
 - 370. Trachea
 - 371. Aorta
 - 372. Ileum

2023 National FFA Veterinary Science CDE – Equine Workstream

19. Which of the following is a common equine respiratory disease that horse owners will have their horses vaccinated for? (McCurnin p.668 9th edition)

- 373. Equine herpesvirus types 1 and 4 (Equine Rhinopneumonitis)
- 374. West Nile Virus
- 375. Potomac Horse Fever
- 376. Eastern Equine Encephalitis

20. Oxygen in the lungs is exchanged between the blood capillaries and what respiratory structure? ([Merck Veterinary Manual](#))

- 377. Bronchi
- 378. Villi
- 379. Alveoli
- 380. Trachea

21. NSAIDs are a class of drug commonly used in equine medicine, what does this acronym stand for? (McCurnin p.913 9th edition)

- 381. Nonsedative anti-infection drug
- 382. Nonsteroidal anti-infection drug
- 383. Nonsedative anti-inflammatory drug
- 384. Nonsteroidal anti-inflammatory drug

22. Which method below is NOT a currently available method for diagnosing parasites in horses? (McCurnin p.614 9th edition)

- 385. Direct examination of feces
- 386. Fecal dehydration
- 387. Fecal flotation
- 388. Fecal culture

23. Which part of the horse's hoof is normally considered non-weight bearing? ([University of Missouri Extension: Functional Anatomy of the Horse Foot](#))

- 389. Sole
- 390. Frog
- 391. Wall
- 392. Bars

24. What diseases are considered part of the American Association of Equine Practitioner's core vaccination schedule for adult horses? ([AAEP Core Vaccination Schedule](#))

- 393. Eastern/Western Equine Encephalomyelitis, West Nile Virus, Equine Herpesvirus
- 394. West Nile Virus, Equine Herpesvirus, Rabies
- 395. Eastern/Western Equine Encephalomyelitis, West Nile Virus, Tetanus
- 396. West Nile Virus, Strangles, Rabies

2023 National FFA Veterinary Science CDE – Small Animal Workstream

17. Which complete blood count (CBC) value would Dr. Peelman expect to see elevated if Ricky had an allergic reaction or intestinal parasites? (McCurnin pg. 383 9th edition)

- 165. Eosinophils
- 166. Platelets
- 167. Spherocytes
- 168. Monocytes

18. What is true about the “big three” of radiation safety? (McCurnin pg. 504 9th edition)

- 169. Shielding matters only with older patients.
- 170. Time means avoiding retakes, do it right the first time.
- 171. Distance means getting as close to the x-ray beam as is comfortable.
- 172. When shielding, use aprons made of a poly blend.

19. What is not associated with radiography settings? (McCurnin pg. 492 9th edition)

- 173. kVp
- 174. mAs
- 175. PACS
- 176. Thickness, cm

The veterinary nurse also collects a urine sample through cystocentesis for evaluation.

20. Which value would be elevated if Ricky developed diabetes mellitus? (McCurnin pg. 400 9th edition)

- 177. Ketones
- 178. Specific gravity
- 179. pH
- 180. Bilirubin

21. Which value indicates the kidneys are concentrating the urine properly? (McCurnin pg. 398 9th edition)

- 181. Ketones
- 182. Specific gravity
- 183. pH
- 184. Bilirubin

22. What information cannot be determined by the instrument pictured?

- 185. Grade of murmur
- 186. Respiratory rate
- 187. Heart rate
- 188. PCV

23. Which instrument can signal hyperthermia? (189-192)

- 189.
- 190. Thermometer
- 191.
- 192.

2023 National FFA Veterinary Science CDE – Small Animal Workstream

Since Ricky's ears have been bothering him, the veterinary nurse swabs his ears and prepares a slide for microscopic examination.

24. What organism did she identify?

- 193. Yeast
- 194. Ear mite
- 195. Cocci
- 196. Rods

25. Which instrument is used to examine Ricky's tympanum? (197-200)

- 197.
- 198.
- 199.
- 200. Otoscope

If left untreated, Ricky's ear infection will worsen, he'll continue to shake his head, and multiple health issues may arise.

26. Which is not associated with an untreated ear infection? (McCurnin pg. 1282 9th edition)

- 201. Aural hematoma
- 202. Anterior uveitis
- 203. Otitis media
- 204. Ruptured tympanum

27. If Ricky continues to scratch his ears, Dr. Peelman may send this home to avoid injury. (205-208)

- 205. Elizabethan collar
- 206.
- 207.
- 208.

In addition to the scales and hair loss Ms. Carroll reported, Dr. Peelman identified pustules on Ricky's abdomen during her physical exam.

28. These clinical signs are consistent with which ailment below? (McCurnin pg. 224 9th edition)

- 209. Excoriations
- 210. Mange
- 211. Dermatophytosis
- 212. Bacterial skin infection

It's time to vaccinate Ricky! He goes to the groomer every 8 weeks, so Ms. Carroll wants to make sure he has everything he needs to stay healthy.

2023 National FFA Veterinary Science CDE – Small Animal Workstream

29. Which organism does NOT contribute to canine infectious respiratory disease complex, more commonly known as “kennel cough”? (McCurnin pg. 254 9th edition)
- 213. Canine adenovirus type 2
 - 214. Canine parainfluenza virus
 - 215. **Leptospira**
 - 216. Bordetella bronchiseptica
30. Which virus is NOT considered a core canine vaccine by the American Animal Hospital Association? (McCurnin pg. 255 9th edition)
- 217. Rabies virus
 - 218. Canine parvovirus
 - 219. **Canine influenza virus**
 - 220. Canine distemper virus
31. Which vaccine is regulated across the United States to protect public health? (McCurnin pg. 253 9th edition)
- 221. **Rabies vaccine**
 - 222. Canine coronavirus vaccine
 - 223. Canine influenza vaccine
 - 224. Canine distemper vaccine
32. Most vaccines are given subcutaneously. Use the diagram provided to identify the subcutaneous layer of the skin. **(225-228)**
- 225.
 - 226.
 - 227.
 - 228.
33. Which needle is most appropriate for giving Ricky a subcutaneous injection?
- 229. 20 G x 1 1/2"
 - 230. **22 G x 3/4"**
 - 231. 14 G x 2"
 - 232. 25 G x 5/8"
34. Which syringe is most appropriate for a vaccine volume of 1 milliliter?
- 233. **3 ml syringe**
 - 234. TB syringe
 - 235. 5 ml syringe
 - 236. 6 ml syringe
35. What is the pictured equipment used for?
- 237. Urine collection
 - 238. Stool collection
 - 239. **Blood collection**
 - 240. Saliva collection

2023 National FFA Veterinary Science CDE – Small Animal Workstream

The blood parasite screening Dr. Peelman recommended checks for heartworm disease and 3 tickborne diseases.

36. What disease causes lameness, swollen joints, fever, and possibly swollen lymph nodes?

(McCurnin pg. 116 9th edition)

241. Ehrlichiosis

242. Lyme disease

243. Anaplasmosis

244. Heartworm disease



While you are observing Sparky you are asked to determine his Body Condition Score (BCS).

5. Which BCS would be given to a cow that is extremely thin, showing very prominent ribs and bones, with little to no sign of fat or muscle?
 - a. BCS 9
 - b. BCS 5
 - c. BCS 3
 - d. BCS 1 [GK1] - *University of Missouri Extension, [Online](#)*

Once you have evaluated the cattle for overall health, you request that the producer



9. What is the most common and costly disease affecting the North American beef cattle industry?
- Parasitism
 - Mastitis
 - Bovine respiratory disease [GK2] - Merck Vet Manual, [Online](#)
 - Pink eye

The veterinary medical record indicates that this farm has had a previous issue with

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

11. With respect to food-producing animals, why is it recommended to perform intramuscular injections in the lateral cervical region?
- The cervical muscles are easily discarded and not considered an economically favorable cut. [GK3] - McCurnin 9th Edition, p. 590
 - Performing injections near the head will reduce the chances of the operator getting kicked.
 - The cervical muscles are very large and provide a bigger area for intramuscular injections.
 - There are no structures in the neck that can be damaged by an intramuscular injection.

12. Antimicrobial residues in cattle carcasses are a serious concern leading to antimicrobial resistance and other human health implications. You recommend that your clients adhere to all withdrawal times and to keep medical records on all animals that ship for slaughter for _____ in order to furnish those records to the appropriate government regulatory agencies in the event of an antimicrobial meat residue.
- a. 18 months
 - b. 2 years [GK4] - *Merck Vet Manual 10th Edition p. 1886*
 - c. 5 years
 - d. 7 years
13. What is the most prevalent metabolic disease in cattle?
- a. Diabetes
 - b. Hypothyroidism
 - c. Hyperinsulinism
 - d. Ketosis [GK5] - *McCurnin 9th Edition, p. 702*
14. What is milk fever in dairy cows typically treated with?
- a. Intravenous glucose
 - b. Intravenous calcium [GK6] - *McCurnin 9th Edition, p. 702*
 - c. Intravenous atropine
 - d. Intravenous antibiotics
15. Cattle and swine display what type of estrous cycle?
- a. Polyestrous [GK7] - *McCurnin 9th Edition, p. 350*
 - b. Seasonally polyestrous
 - c. Diestrus
 - d. Monoestrous

16. What is the average length of gestation in cattle?

- a. 63 days
- b. 145 days
- c. 279 days [GK8] - *McCurnin 9th Edition, p. 350*
- d. 330 days

As you examine Gretta, you determine that she is pregnant. You review the owner's calving plan and recommend the owner ensure the calf receives at least 150 grams of Immunoglobulin G (IgG) after delivery.

17. IgG is a critical component found in _____, which should be ingested by the calf within 6-8 hours of birth to ensure passive transfer of immunity.

- a. Serum
- b. Colostrum [GK9] - *Merck Vet Manual 10th Edition, p. 1921*
- c. Placenta
- d. Vitamins

20. Food travels through the stomach of the ruminant in what order?

- a. Reticulum, rumen, omasum, abomasum
- b. Rumen, reticulum, abomasum, omasum
- c. Rumen, omasum, reticulum, abomasum
- d. Rumen, reticulum, omasum, abomasum [GK10] - *Merck Vet Manual, [Online](#)*

21. One metric ton of livestock feed is equal to:

- a. 2,000 lb
- b. 2,200 kg
- c. 2,205 lb [GK11] - Merck Vet Manual, [Online](#)
- d. 2,000,000 mg

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

24. Which of the following is NOT part of the PASS mnemonic?

- a. Pull the pin
- b. Aim high [GK12] - *McCurnin 9th Edition, p. 111*
- c. Squeeze the handle
- d. Sweep from side to side

25. In order to complete a CVI for livestock moving across state lines, a veterinarian must be _____.

- a. USDA Category I Accredited
- b. USDA Category II Accredited [GK13] - *USDA NVAP [Online](#)*
- c. USDA Validated/Qualified
- d. Trained as a USDA Foreign Animal Disease Diagnostician

28. Magnets are administered orally to cattle to prevent what disease?

- a. Polioencephalomalacia
- b. Tetanus
- c. Reticuloperitonitis [GK14] - *McCurnin 9th Edition, p. 696*
- d. Bloat

29. A fight between two large pigs is usually handled by:
- a. Lassoing each pig and pulling them apart
 - b. Shooting each pig with a dart gun loaded with a sedative
 - c. Placing a solid panel of plywood between them [GK15] - *McCurnin 9th Edition, p. 193*
 - d. Making a very loud noise to scare the pigs so they separate
30. What are essential items for the safety of veterinary personnel restraining pigs.
- a. Heavy leather gloves
 - b. Durable work boots
 - c. Hard plastic forearm covers
 - d. Ear plugs – [GK16] - *McCurnin 9th Edition, p. 194*

SCANTRON PART 2 - Continuing the exam by answering the questions below on the reverse side of the provided scantron. Utilize the LEFT column, questions will restart at one.

1. Farrowing is:
- a. Another term for weaning in pigs
 - b. Placing groups of pigs in pens according to their age
 - c. Removing a pig from the herd for slaughter
 - d. The term applied to a sow giving birth [GK17] - *McCurnin 9th Edition, p. 350*
2. A lactating sow nursing 10 piglets should receive at least ____ lbs of feed daily.
- a. 5
 - b. 10
 - c. 15 [GK18] - *McCurnin 9th Edition, p. 335*
 - d. 20

3. Most commercial market hogs weigh approximately how many pounds when sent to slaughter?
 - a. 50-120
 - b. 125-200
 - c. 225-300 [GK19] - *McCurnin 9th Edition, p. 335*
 - d. 325-400

4. What is a disease of pigs for which they should be vaccinated that causes fever, skin lesions, sudden death, and chronic endocarditis or chronic arthritis.
 - a. Leptospirosis
 - b. Erysipelas [GK20] - *McCurnin 9th Edition, p. 268*
 - c. Pseudorabies
 - d. Brucellosis

While examining the pigs, you notice a piglet with a vesicular lesion on its snout. Because there are multiple species on site, you need to consider diseases that affect multiple species.

5. Which disease of swine also impacts other livestock species like cattle and horses?
 - a. Seneca Virus A
 - b. Vesicular Exanthema of Swine
 - c. Vesicular Stomatitis [GK21] - *CFSPH Vesicular Diseases Reference Chart*
 - d. Swine Vesicular Disease

6. Pigs are generally considered a/an _____ in the pathogenesis of Foot and Mouth Disease (FMD).
 - a. Disease indicator
 - b. Maintenance host
 - c. Amplifying host [GK22] - *CFSPH Vesicular Diseases Reference Chart*
 - d. Carrier

7. Which serotype of FMD virus is currently the most common circulating serotype in the world?

- a. Type O [GK23] - *CFSPH FMD Fact Sheet*
- b. Type Asia-1
- c. Type SAT-1
- d. Type A

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

10. Which of the following disinfectants is LEAST effective against Seneca Virus A?

- a. Bleach
- b. Accelerated hydrogen peroxide
- c. Phenolic disinfectants [GK24] - *SHIC / CFSPH Senecavirus A Fact Sheet*
- d. Sodium hydroxide

END OF SEGMENT 1 - Once instructed, rotate to the next segment. Additional time is provided for the next set of questions.

SEGMENT 2 - PRACTICUM ROOM B

SCANTRON PART 2 - Continue the exam below, questions will resume with 16. If you are beginning in Practicum Room B, leave questions 11-15 unanswered on the scantron until you rotate into Practicum Room A.

The producer is updating his calving plan to include the intramuscular administration of Bo-Se ® (Selenium, Vitamin E).

16. What does Bo-Se ® (Selenium, Vitamin E) help prevent in calves, lambs, and ewes?

- a. White muscle disease [GK25] - *McCurnin 9th Edition, p. 690*
- b. Mulberry heart disease
- c. Tetanus
- d. Blackleg disease

SEGMENT 3

SCANTRON PART 2 - Continue completing the scantron where you left off in Segment 2, questions will resume with 21.

After collecting samples for the Foreign Animal Disease investigation, the state veterinarian's office instructs you to inform the owner that no animals should move on or off the property until test results are received. You also discuss enhanced biosecurity protocols with the producer.

21. When working with animals during chores, what order is recommended to help prevent the spread of disease?
- a. Sick animals first, then older animals, then the healthiest and youngest animals.
 - b. Healthiest and youngest animals first, then older animals, then sick animals last. [GK26] - McCurnin 9th Edition, p. 268
 - c. Older animals first, then sick animals, then the healthiest and youngest animals.
 - d. It doesn't matter what order the animals are cared for.

23. What type of biosecurity practice helps reduce parasites in animal living environments?

- a. Vaccination
- b. Using feed containers instead of ground-feeding [GK27] - Merck Vet Manual, [Online](#)
- c. Quarantine of new animals
- d. Wearing gloves when handling animals

24. Identify the parasite most likely to cause diarrhea in cattle and pigs. [ID18] - Coccidia (and distractors) - C

25. Which of the following is NOT a suggested method for carcass disposal?

- a. Burial
- b. Composting
- c. Feeding to other livestock/pets [GK28] - *CFSPH FMD Fact Sheet*
- d. Rendering

END OF SEGMENT 3 - Once instructed, proceed to Team Activity Prep.

2. When performing a physical exam on a patient:
 - a. Always conduct the exam in a differing order
 - b. Always conduct the exam in the same order [GK1] - *McCurnin 9th Edition, p. 213*
 - c. Always examine the body system that is of concern first
 - d. Only examine the body system that is of concern

3. The patient's heart rate is 240 bpm. Which term describes this abnormal finding in the cat?
 - a. Bradycardia
 - b. Hypercardia
 - c. Megacardia
 - d. Tachycardia [GK2] - *McCurnin 9th Edition, p. 1322*

4. Which occurs if a patient is dehydrated?
 - a. Pyrexia
 - b. Hematuria
 - c. Hypotension [GK3] - *McCurnin 9th Edition, p. 1059*
 - d. Retinal hemorrhage

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

11. Which type of IV fluid is generally considered well suited for use in resuscitation due to their tendency to remain within the vascular space and provide relatively efficient and prolonged volume expansion?

- a. Colloids [GK4] - *McCurnin 9th Edition, p. 820*
- b. Isotonic crystalloids
- c. Hypotonic crystalloids
- d. Hypertonic crystalloids

12. Which of the following physical indicators is consistent with dehydration in the veterinary patient?

- a. Decreased heart rate
- b. Decreased skin turgor [GK5] - *McCurnin 9th Edition, p. 237, 238*
- c. Decreased body temperature
- d. Decreased capillary refill time

[REDACTED]

16. Which electrolyte is most dangerous to the patient's heart when there is a urinary blockage?

- a. Sodium
- b. Potassium [GK9] - *McCurnin 9th Edition, p. 859, 870*
- c. Magnesium
- d. Chloride

Heart murmurs are generally classified by their intensity and when they occur in the cardiac cycle.

17. Which of the following is not considered an appropriate classification of a heart murmur in the veterinary patient?

- a. Systolic, Grade II
- b. Diastolic, Grade, IV
- c. Ventricular, Grade VII [GK10] - *McCurnin 9th Edition, p. 219*
- d. Continuous, Grade V

18. Using a drug in any manner other than in accordance with the approved labelled use is called:

- a. Compounding
 - b. Extra-label [GK11] - *McCurnin 9th Edition, p. 973*
 - c. Prescribing
 - d. Illegal
- [REDACTED]

19. What class of drugs do acepromazine and buprenorphine belong to respectively?

- a. Sedative / Alpha2 Agonist
- b. Sedative / Opioid (Partial Mu Agonist) [GK12] - *McCurnin 9th Edition, p. 993*
- c. Alpha2 Agonist / Sedative
- d. Opioid (Partial Mu Agonist) / Sedative

20. A licensed veterinary technician is prohibited from doing all of the following except:

- a. Diagnosing
- b. Prescribing
- c. Prognosing
- d. Treating [GK13] - *McCurnin 9th Edition, p. 24*

22. Which of the following is the least desired method for collecting urine for a urinalysis from the veterinary patient?

- a. Free catch
- b. Cystocentesis
- c. Catheterization
- d. Collection from the floor, cage, or empty litter box [GK14] - *McCurnin 9th Edition, p. 397*

23. Define "Cystotomy"

- a. Incision into the kidney
- b. Incision into the urethra
- c. Incision into the coelom
- d. Incision into the urinary bladder [GK15] - *McCurnin 9th Edition, p. 1309*

24. Visual examination of the urine sample includes which of the following?

- a. Glucose and ketones
- b. Color and turbidity [GK16] - *McCurnin 9th Edition, p. 398*
- c. Turbidity and glucose
- d. Ketones and color

25. What are the two most common calculi in cats that can lead to lower urinary tract diseases?

- a. Struvite and calcium oxalate [GK17] - *Merck Vet Manual, [Online](#)*
- b. Struvite and calcium carbonate
- c. Amorphous calcium and struvite
- d. None of the above

29. If a urinary obstructed male cat goes 12 to 24 hours without urination, what other clinical signs/conditions may occur?

- a. Nothing
- b. Cardiac arrhythmias, anemia, and dehydration
- c. Electrolyte abnormalities, anemia, and kidney dysfunction
- d. Electrolyte abnormalities, cardiac arrhythmias, and kidney dysfunction –
[GK18] - McCurnin 9th Edition, p. 653

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2. [REDACTED]
3. While restraining animals for radiographs, it is important to always wear which pieces of personal protective equipment?
 - a. Lead gloves, lead apron, and thyroid shield [GK22] - *McCurnin 9th Edition, p. 503*
 - b. Lead gloves, lead pants, and thyroid shield
 - c. Lead apron, lead pants, and thyroid shield
 - d. Lead pants, lead glasses, and lead apron
4. Which two diagnostic imaging tools utilize x-rays?
 - a. Computed tomography and magnetic resonance imaging
 - b. Magnetic resonance imaging and ultrasonography
 - c. Digital radiography and computed tomography [GK23] - *Merck Vet Manual, [Online](#)*
 - d. Computed tomography and ultrasonography
5. What information is part of the legal medical record and should be included within the DICOM files tag to ensure access of the radiograph at a later date?
 - a. Name of patient and owner
 - b. Date of examination
 - c. Name and location of practice
 - d. All of the above [GK24] - *McCurnin 9th Edition, p. 499, 491*

6. Which radiographic views are recommended as the standard when imaging a cat's abdomen?

- a. Right lateral, left lateral, and ventrodorsal [GK25] - *Merck Vet Manual, Online*
- b. Right lateral, left lateral, and dorsoventral
- c. Right lateral and left lateral
- d. None of the above

END OF SEGMENT 1 - Once instructed, rotate to the next segment. Additional time is provided for the next set of questions.