

## Small Animal (Cat, Dog, Rabbit): Anatomy & Physiology

1. Which of the following can be visualized by using an otoscope to look in a dog's ear?
  - a. Tympanic membrane
  - b. Cochlea
  - c. Laryngeal bullae
  - d. Pharynx
2. How many incisors does a rabbit have?
  - a. 0
  - b. 2
  - c. 4
  - d. 6
3. Which of the following animals has 2 cervixes and a duplex uterus?
  - a. Cat
  - b. Dog
  - c. Rabbit
  - d. Pig
4. The muscular sphincter located between the stomach and duodenum is the
  - a. Pylorus
  - b. Cardia
  - c. Chyme
  - d. Rugae
5. Canine cataracts are due to a problem with transparency of the
  - a. Cornea
  - b. Lens
  - c. Vitreous humor
  - d. Aqueous humor
6. What percent of a healthy cat's body weight is blood?
  - a. 1%
  - b. 8%
  - c. 14%
  - d. 18%
7. A veterinarian is able to count a German Shepard's pulse by placing his fingers in the dog's inguinal area. What blood vessel is the veterinarian palpating?
  - a. Femoral artery
  - b. Inguinal vein
  - c. Popliteal artery
  - d. Saphenous artery
8. Which of the following is a lymphatic structure found exclusively in rabbits?
  - a. Peyer's patches
  - b. Haustra
  - c. Lacteals
  - d. Sacculus rotunda
9. The term for an animal ingesting its own feces is
  - a. Coprology
  - b. Coprophagy
  - c. Cecotroph
  - d. Cecotomy

10. The glands found on the lips of cats used for marking territory are called
- Apocrine sweat glands
  - Circumoral glands
  - Salivary glands
  - Sebaceous glands
11. English bulldogs often have a bottom jaw that is longer than their top jaw. The name of this condition is
- Dolichocephalic
  - Wry mouth
  - Maxillary prognathism
  - Mandibular prognathism
12. Where is the most common site for a spinal fracture caused by a rabbit suddenly kicking his back legs with force?
- Cervical spine
  - Between T2 and T4
  - Between L6 and L7
  - Sacral vertebrae
13. Rabbits do not have
- Foot pads
  - Incisors
  - Patellas
  - Clavicles
14. What anatomical feature is well developed and positioned in a way that prevents rabbits from being able to vomit?
- Larynx
  - Cardiac sphincter
  - Pyloric antrum
  - Cecum
15. What is the term used to describe this area of the dog leg?

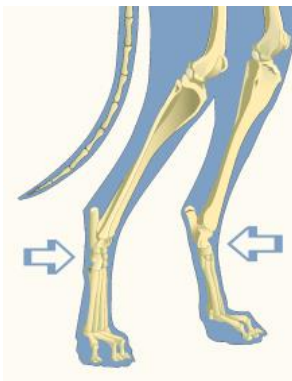


Photo Credit:

<http://revealingpaws.com/revealingpaws/uk%20pages/Content%20UK/Glossary/Individual%20Words/Hock.htm>

- Hock
- Stifle
- Metatarsus
- Carpus

16. Dogs and cats have nociceptors, which are important for detecting
  - a. Lactic acid
  - b. High blood glucose
  - c. Heat
  - d. Pain
17. Renin is secreted by
  - a. Kidney
  - b. Hypothalamus
  - c. Liver
  - d. Adrenal cortex
18. Yellow mucus membranes would suggest
  - a. Renal disease
  - b. Hepatic disease
  - c. Shock
  - d. Anemia
19. A capillary refill time of 2 seconds indicates
  - a. Shock
  - b. Anemia
  - c. Dehydration
  - d. A normal healthy animal
20. How many teeth do adult dogs have?
  - a. 28
  - b. 32
  - c. 42
  - d. 48

**Swine: Disease (causes & sources, signs & symptoms)**

21. \_\_\_\_\_ is a highly, contagious viral disease that affects the central nervous system in swine. It is also known as pseudorabies.
  - a. Aujeszky's disease
  - b. Brucellosis
  - c. Leptospirosis
  - d. Blue eye disease
22. Which of the following diseases is NOT zoonotic, transmissible from swine to humans?
  - a. Salmonella
  - b. Leptospirosis
  - c. Hog Cholera
  - d. Q fever
23. How is leptospirosis transmitted?
  - a. Drinking contaminated water
  - b. Inhalation of the bacteria
  - c. Bacteria can enter through cuts in the skin
  - d. All of the above
24. What is a viral disease of pigs, spread by fruit bats, that causes mummified and stillborn piglets?
  - a. Menangle
  - b. Q fever
  - c. Getah Virus
  - d. Ricin

25. Which of the following clinical signs is NOT associated with vesicular stomatitis in swine?
- Swelling of the eyes
  - Blisters on tongue and lips
  - Refusal to eat or drink
  - Blisters on hooves
26. Swine trichuriasis is caused by
- Roundworm
  - Tapeworm
  - Whipworm
  - Lung worm
27. Which of the following parasitic diseases is transmitted to swine primarily by triatomine insects and can cause heart disease, megaesophagus, and megacolon among humans?
- Trichuriasis
  - Trypanosomiasis
  - Taenia
  - Sarcocystosis
28. These diamond shaped lesions are typical with which of the following diseases?



Photo Credit: [https://www.studyblue.com/notes/n/bact-](https://www.studyblue.com/notes/n/bact-final/deck/9383351)

[final/deck/9383351](https://www.studyblue.com/notes/n/bact-final/deck/9383351)

- Vesicular disease
  - Erysipelas
  - Foot and Mouth Disease
  - Ehrlichiosis
29. Which of the following statements about tetanus in pigs is FALSE?
- It is caused by the bacterium *Clostridium tetani*.
  - The organism that causes tetanus must be ingested to infect the pig.
  - The organism that causes tetanus produces toxins that affect the pig's central nervous system.
  - The organism that causes tetanus can be found in certain soils.
30. A pig that is exhibiting stiffness of his legs and muscles, an erect tail, and muscle spasms of his face and ears is most likely suffering from
- Tetanus
  - Foot and mouth disease
  - Vesicular disease
  - Blue eye disease
31. Normal levels of \_\_\_\_\_ in a pig's diet become toxic if the pig does not have access to water and becomes dehydrated.
- Calcium
  - Phosphorus
  - Salt
  - Vitamin A

32. If a pig walks up to a wall, stands, and presses his head up against it, it is possible that pig has
- Tetanus
  - Salt poisoning
  - Vitamin A toxicity
  - This is normal behavior for pigs that may have a headache.
33. Which bacterium is associated with exudative epidermitis in swine?
- Staphylococcus*
  - Clostridium*
  - Brucella*
  - Streptococcus*

**Horse: Identification of equipment, parasites, and breeds**

34. When a horse is presenting for distress and/or difficulty during restraint which of the following tools can be used to have an analgesic effect on the patient?
- Twitch
  - Dosing Gun
  - Halter
  - Reins
35. Identify the breed of this horse.



Reference: <http://equusmagnus.tumblr.com/page/3>

- Arabian
  - Hanoverian
  - Friesian
  - Thoroughbred
36. Which of the following equine parasites is a potential cause for anemia due to the parasite being an active blood feeder and ingesting mucosal plugs while moving through the intestines?
- Adult Hookworms
  - Adult Large Strongyles
  - Roundworm Larvae
  - Whipworm Larvae

37. Identify the breed of this horse.



Reference: <http://www.horsesuppliesusa.com/arabian-horse>

- a. Arabian
  - b. Quarter Horse
  - c. Saddlebred
  - d. Percheron
38. What piece of equipment is used in English saddlery to keep a saddle from sliding when properly used?
- a. Bridle
  - b. Stirrups
  - c. Girth
  - d. Browband
39. Which of the following is an intestinal parasite that begins its life cycle as larvae attached to the horse's coat?
- a. Threadworms
  - b. Roundworms
  - c. Small Strongyles
  - d. Bots

40. Identify the breed of this horse.



Reference: <https://aqha.com/journal/blogs/2015/november/11092015->

[kid-coolsified-aqha-journal-article/](#)

- a. American Quarter Horse
  - b. Andalusian
  - c. Clydesdale
  - d. American Paint Horse
41. Which of the following is the horse pinworm?
- a. *Dictyocaulus arnfieldi*
  - b. *Oxyuris equi*
  - c. *Trichostrongylus axei*
  - d. *Strongyloides westeri*

42. What is this medical device used for in equine medicine?



Reference: [http://www.bigdweb.com/Dental-](http://www.bigdweb.com/Dental-Floats/productinfo/6230/)

[Floats/productinfo/6230/](http://www.bigdweb.com/Dental-Floats/productinfo/6230/)

- a. Manual dental float
- b. Hoof Rasp
- c. Twitch
- d. Curry Comb

43. Identify this breed of horse.



Reference: [http://www.theracingbiz.com/2014/02/17/virginia-](http://www.theracingbiz.com/2014/02/17/virginia-thoroughbred-association-aims-best-stallion-season-auction/)

[thoroughbred-association-aims-best-stallion-season-auction/](http://www.theracingbiz.com/2014/02/17/virginia-thoroughbred-association-aims-best-stallion-season-auction/)

- a. Missouri Fox Trotter
- b. Appaloosa
- c. Thoroughbred
- d. Arabian

44. *Parascaris equorum*, an ascarid, is most commonly found in the small intestine during which life stage of a horse?

- a. Adult
- b. Young
- c. Senior
- d. Neonatal

45. What is the tool used by farriers to take off excess hoof material in relative large quantities?



Reference: [https://www.valleyvet.com/ct\\_detail.html?pgguid=2e87beb4-7b6a-11d5-a192-00b0d0204ae5](https://www.valleyvet.com/ct_detail.html?pgguid=2e87beb4-7b6a-11d5-a192-00b0d0204ae5)

- a. Hoof nippers
- b. Hoof pick
- c. Driving hammer
- d. Hoof Rasp

46. What is this breed of pony?



Reference: <http://myhorseforum.com/threads/foals-2013.507613/>

- a. Fell
- b. Welsh
- c. Shetland
- d. Connemara

47. What is the parasite that is affecting this horse?



Reference: [http://www.merial.cl/Equine/Pages/disease\\_info.aspx](http://www.merial.cl/Equine/Pages/disease_info.aspx)

- a. Bot larvae
- b. Biting midges
- c. Roundworm larvae
- d. Gnat larvae



48. What is this type of bit?



Photo Credit:

<http://www.justforponies.com/smithworthingtoneggbuttsnaffle.aspx>

- a. Fulmer snaffle
- b. Dee ring snaffle
- c. Eggbutt snaffle
- d. Full cheek snaffle

49. Examining a fecal from a horse under the microscope reveals the following parasitic egg. What is it?

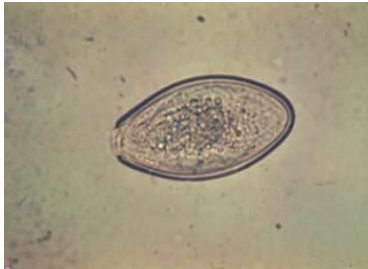


Photo Credit: <http://eggzamin.com/for-the-vet/the-parasites/>

- a. Strongyle
- b. Coccidia oocyst
- c. Tapeworm
- d. Pinworm

50. Examining a fecal from a horse under the microscope reveals the following parasitic egg. What is it?



Photo Credit: <http://eggzamin.com/for-the-vet/the-parasites/>

- a. Strongyle
- b. Coccidia oocyst
- c. Tapeworm
- d. Pinworm

## 2016 Vet Science Exam Key

1. A
2. C
3. C
4. A
5. B
6. B
7. A
8. D
9. B
10. B
11. D
12. C
13. A
14. B
15. A
16. D
17. A
18. B
19. D
20. C
21. A
22. C
23. D
24. A
25. A
26. C
27. B
28. B
29. B
30. A
31. C
32. B
33. A
34. A
35. C
36. B
37. A
38. C
39. D
40. A
41. B
42. A
43. C
44. B
45. A
46. C

47. A
48. C
49. D
50. A

## 2016 FFA Veterinary Science CDE Written Scenario

Veterinarians are responsible for responding to outbreaks, informing the public about the disease, and creating biosecurity protocols. During the past 2 years, the United States Department of Agriculture (USDA) has confirmed several cases of the H5N1 strain of avian influenza in the Midwest United States. The H5N1 strain of avian influenza is highly pathogenic and can completely devastate poultry farms. In 2015, Iowa lost over 30 million hens and 1.5 million turkeys. The economic impact was estimated at 1.2 billion dollars. Write a short essay response to the following avian influenza scenario utilizing expository style of writing and the references provided:

A poultry farmer in northern Iowa has 500 egg-laying hens. Avian influenza outbreaks are being reported throughout Minnesota and are rapidly moving south into Iowa, resulting in the farmer fearing for the health of his flock of chickens. Discuss the H5N1 strain of avian influenza with the farmer. Include information regarding disease transmission, clinical signs, diagnosis, and treatment. Discuss the impact of an avian influenza outbreak. Develop a biosecurity protocol for the farmer to implement.

Resources:

United States Department of Agriculture

[http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=avian\\_influenza.html](http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=avian_influenza.html)

Center for Disease Control <http://www.cdc.gov/flu/avianflu/>

Iowa Department of Agriculture and Land Stewardship

<http://www.iowaagriculture.gov/avianinfluenza.asp>

University of Minnesota Center for Infectious Disease Research and Policy

<http://www.cidrap.umn.edu/news-perspective/2015/08/report-finds-12-billion-iowa-avian-flu-damage>