

Core Veterinary Science Knowledge

Veterinary Science · Answer Key · 10 Questions

1. Which of the following is the primary zoonotic pathogen commonly associated with the bite of a domestic cat and can cause a serious, potentially debilitating illness in humans?

- A) Salmonella enterica
- B) E. coli O157:H7
- C) Pasteurella multocida**
- D) Listeria monocytogenes

2. The anticoagulant effect of warfarin in rodenticides is primarily due to its inhibition of which vitamin's synthesis, essential for the production of clotting factors?

- A) Vitamin A
- B) Vitamin K**
- C) Vitamin C
- D) Vitamin D

3. Which common veterinary antibiotic, a macrolide, is particularly effective against Mycoplasma species and is often used in poultry and swine production?

- A) Enrofloxacin
- B) Tetracycline
- C) Tylosin**
- D) Penicillin

4. The diagnostic technique that uses a stethoscope to listen to internal body sounds, such as heartbeats and lung sounds, is known as:

- A) Palpation
- B) Percussion
- C) Auscultation**
- D) Ophthalmoscopy

5. What is the scientific name for the highly contagious viral disease that affects the respiratory and nervous systems of dogs, often manifesting with fever, nasal discharge, and neurological signs?

- A) Canine Parvovirus
- B) Canine Adenovirus
- C) Canine Distemper Virus**
- D) Canine Influenza Virus

6. Which of the following is a major histocompatibility complex (MHC) class I molecule, crucial for presenting intracellular antigens to cytotoxic T lymphocytes in most vertebrates?

- A) CD4
- B) CD8
- C) T-cell receptor
- D) MHC Class I**

7. The process by which an animal's body temperature is regulated through physiological mechanisms, such as shivering and sweating, is called:

- A) Thermolysis
- B) Thermogenesis
- C) Thermoregulation**
- D) Hyperthermia

8. Which parasite is a common cause of sarcoptic mange in canids, characterized by intense pruritus, alopecia, and excoriations?

- A) Demodex canis
- B) Sarcoptes scabiei**
- C) Otodectes cynotis
- D) Cheyletiella yasguri

9. The surgical removal of a portion of the intestine due to obstruction or disease is termed:

- A) Gastropexy
- B) Enterotomy
- C) Colectomy
- D) Resection and anastomosis**

10. Which hormone, secreted by the adrenal cortex, plays a critical role in regulating electrolyte balance and maintaining blood pressure?

- A) Insulin
- B) Glucagon
- C) Aldosterone**
- D) Cortisol