

Veterinary Science Fundamentals

Veterinary Science · Answer Key · 18 Questions

1. Which of the following is the primary mechanism of action for non-steroidal anti-inflammatory drugs (NSAIDs) in animals?

- A) Inhibition of cyclooxygenase (COX) enzymes**
- B) Blockade of histamine receptors
- C) Stimulation of endorphin release
- D) Interference with cellular respiration

2. What is the causative agent of rabies, a zoonotic viral disease that affects the central nervous system?

- A) Rhabdovirus**
- B) Paramyxovirus
- C) Retrovirus
- D) Flavivirus

3. The production of antibodies is a key function of which type of white blood cell?

- A) B lymphocytes**
- B) Neutrophils
- C) Eosinophils
- D) Monocytes

4. In veterinary cardiology, what does an electrocardiogram (ECG) primarily measure?

- A) Electrical activity of the heart**
- B) Blood flow through the ventricles
- C) Oxygen saturation in the blood
- D) Pressure within the aorta

5. Which of the following is a common diagnostic imaging technique used to visualize the internal structures of the body by using magnetic fields and radio waves?

- A) Magnetic Resonance Imaging (MRI)**
- B) Computed Tomography (CT)
- C) X-ray radiography
- D) Ultrasound

6. What is the term for a surgical procedure to remove the uterus and ovaries, commonly performed in female dogs and cats?

- A) Ovariohysterectomy**
- B) Orchiectomy
- C) Nephrectomy
- D) Hepatectomy

7. Which parasitic disease in ruminants is characterized by liver damage and is transmitted by the ingestion of infected grass containing snails?

A) Fascioliasis (Liver Fluke)

- B) Toxoplasmosis
- C) Giardiasis
- D) Coccidiosis

8. The process by which a pathogen overcomes the host's immune defenses is known as:

A) Pathogenesis

- B) Immunogenesis
- C) Histogenesis
- D) Carcinogenesis

9. What is the primary role of insulin in animal physiology?

A) Regulating blood glucose levels

- B) Facilitating protein synthesis
- C) Promoting calcium absorption
- D) Stimulating red blood cell production

10. Which common bacterial infection in poultry affects the respiratory system and can cause significant economic losses?

A) Infectious Bronchitis

- B) Avian Influenza
- C) Newcastle Disease
- D) Mycoplasmosis

11. What is the physiological term for the process of an animal eliminating waste products from the body?

A) Excretion

- B) Ingestion
- C) Digestion
- D) Absorption

12. Which veterinary surgical instrument is designed to grasp and hold tissues during surgery?

A) Forceps

- B) Scalpel
- C) Retractor
- D) Hemostat

13. What is the primary difference between an artery and a vein?

A) Arteries carry blood away from the heart, veins carry blood towards the heart

B) Arteries carry deoxygenated blood, veins carry oxygenated blood

C) Arteries have thicker walls than veins

D) Veins are typically larger in diameter than arteries

14. Which class of drugs is used to kill or inhibit the growth of fungi?

A) Antifungals

B) Antivirals

C) Antibacterials

D) Antiparasitics

15. The scientific study of animal behavior is known as:

A) Ethology

B) Zoology

C) Anatomy

D) Physiology

16. What is the primary function of erythrocytes (red blood cells) in vertebrates?

A) Oxygen transport

B) Immune defense

C) Blood clotting

D) Nutrient transport

17. Which of the following is a common diagnostic test used to detect antibodies or antigens in an animal's blood, often for infectious diseases?

A) Enzyme-Linked Immunosorbent Assay (ELISA)

B) Urinalysis

C) Complete Blood Count (CBC)

D) Blood Urea Nitrogen (BUN) test

18. What is the term for the abnormal curvature of the spine in animals?

A) Scoliosis

B) Arthritis

C) Osteoporosis

D) Fracture