

Veterinary Science Proficiency

Veterinary Science · Practice Test · 18 Questions

1. Which specialized leukocyte is primarily responsible for the production of immunoglobulins in the humoral immune response?

- A) Neutrophil
- B) B-lymphocyte
- C) Eosinophil
- D) Monocyte

2. In bovine anatomy, which of the four stomach compartments is considered the 'true' glandular stomach equivalent to the human stomach?

- A) Rumen
- B) Reticulum
- C) Omasum
- D) Abomasum

3. What is the primary function of the hormone erythropoietin, released by the kidneys in most domestic mammals?

- A) Regulating blood calcium levels
- B) Stimulating red blood cell production
- C) Reducing systemic blood pressure
- D) Controlling insulin secretion

4. Which phase of the cardiac cycle involves the contraction of the ventricles and the closing of the atrioventricular valves?

- A) Ventricular systole
- B) Atrial diastole
- C) Ventricular diastole
- D) Isovolumetric relaxation

5. Which vitamin is essential for the activation of clotting factors II, VII, IX, and X in the liver?

- A) Vitamin A
- B) Vitamin B12
- C) Vitamin K
- D) Vitamin D3

6. What term describes the condition in which a dog's stomach becomes distended and rotates on its mesenteric axis?

- A) Gastric ulceration
- B) Gastric dilatation-volvulus
- C) Pyloric stenosis
- D) Enteritis

7. In veterinary pharmacology, what is the 'therapeutic index' a measure of?

- A) Drug half-life
- B) Metabolic rate
- C) Safety margin of a drug
- D) Absorption efficiency

8. Which structure in the avian respiratory system allows for unidirectional airflow during both inhalation and exhalation?

- A) Diaphragm
- B) Air sacs
- C) Tracheal rings
- D) Bronchioles

9. What is the causative agent of 'Strangles' in equines?

- A) Streptococcus equi
- B) Rhodococcus equi
- C) Equine herpesvirus 1
- D) Clostridium tetani

10. Which mineral deficiency is most commonly associated with 'white muscle disease' in livestock?

- A) Copper
- B) Iron
- C) Selenium
- D) Zinc

11. What is the primary nitrogenous waste product excreted by mammals?

- A) Ammonia
- B) Uric acid
- C) Urea
- D) Creatinine

12. Which canine tooth is characterized by having three roots in the upper jaw?

- A) Incisors
- B) Premolar 4 (Carnassial)
- C) Canine tooth
- D) First molar

13. In terms of animal genetics, what does the term 'phenotype' specifically refer to?

- A) The complete genetic blueprint of an organism
- B) The observable physical or biochemical characteristics
- C) The recessive alleles present in a population
- D) The rate of mutation in germ cells

14. Which cranial nerve is responsible for the motor control of the muscles of mastication?

- A) Trigeminal nerve
- B) Facial nerve
- C) Vagus nerve
- D) Glossopharyngeal nerve

15. What is the function of the 'tapetum lucidum' in the eyes of nocturnal animals?

- A) Filtering harmful UV rays
- B) Regulating pupil dilation
- C) Reflecting light to enhance night vision
- D) Producing aqueous humor

16. Which cell type is responsible for the formation of bone matrix (osteoid)?

- A) Osteoclast
- B) Osteoblast
- C) Chondrocyte
- D) Fibroblast

17. What is the primary role of the 'corpus luteum' in the female reproductive cycle?

- A) Production of follicle-stimulating hormone
- B) Production of progesterone
- C) Maturation of the oocyte
- D) Degradation of the endometrium

18. Which zoonotic disease is commonly transmitted to humans through the ingestion of unpasteurized milk from infected cattle?

- A) Brucellosis
- B) Rabies
- C) Parvovirus
- D) Distemper