

Advanced Veterinary Science Essentials

Veterinary Science · Answer Key · 10 Questions

1. In the four-compartment stomach of a ruminant, which section is physiologically considered the 'true stomach' equivalent to a monogastric stomach?

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

2. Which essential amino acid must cats obtain from their diet because they cannot synthesize it, leading to potential heart and eye issues?

- A) Taurine**
- B) Lysine
- C) Leucine
- D) Valine

3. Horses are anatomically unique among many large mammals because they lack which organ?

- A) Pancreas
- B) Gallbladder**
- C) Spleen
- D) Appendix

4. Theobromine, the toxic compound found in chocolate that is dangerous to dogs, belongs to which chemical class?

- A) Methylxanthines**
- B) Organophosphates
- C) Carbamates
- D) Phenols

5. What is the primary vector responsible for the transmission of *Dirofilaria immitis*, the causative agent of heartworm in canines?

- A) Ticks
- B) Fleas
- C) Mosquitoes**
- D) Stable flies

6. Which immunoglobulin is found in the highest concentration in bovine colostrum, providing essential passive immunity to newborn calves?

- A) IgA
- B) IgE
- C) IgM
- D) IgG**

7. In avian anatomy, what is the scientific name for the muscular 'second stomach' used for grinding food?

- A) Crop
- B) Ventriculus**
- C) Proventriculus
- D) Cloaca

8. Xylitol ingestion in dogs is life-threatening primarily because it causes a rapid and massive release of which hormone?

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

9. Which zoonotic disease is caused by the parasite *Toxoplasma gondii*, for which felids are the only known definitive hosts?

- A) Leptospirosis
- B) Toxoplasmosis**
- C) Brucellosis
- D) Psittacosis

10. Horse sweat contains a specific surfactant protein that causes it to foam or lather; what is this protein called?

- A) Latherin**
- B) Albumin
- C) Casein
- D) Keratin