



Australian and New Zealand College of
Veterinary Scientists

**Veterinary Emergency Medicine and
Critical Care**

Sample Multiple Choice Questions

Paper 1

Answer all multiple choice questions in this section

Each question is worth one and a half (1.5) marks. There is no negative marking.

1. What is the mechanism by which pimobendane increases myocardial contractility in congestive heart failure?
 - a. Increasing calcium sensitisation to troponin C
 - b. Increasing calcium influx to cells
 - c. Inhibiting phosphodiesterase III enzyme activity
 - d. Increasing intracellular adenosine triphosphate (ATP)
2. By which of the following mechanisms does sodium nitroprusside aid in the treatment of congestive heart failure?
 - a. Shifts the Frank-Starling curve
 - b. Is a positive inotrope
 - c. Causes peripheral vasoconstriction
 - d. Reduces afterload
3. What is the mechanism of action of furosemide?
 - a. Inhibits the Na-K-2Cl co-transporter in the ascending loop of Henle
 - b. Inhibits the Na-K-ATPase in the descending loop of Henle
 - c. Inhibits the Na-K-2Cl co-transporter in the collecting ducts
 - d. Inhibits water reabsorption in the descending loop of Henle
4. Which of the following mechanisms have been proposed as the most likely cause for mannitol-induced AKI (MIAKI) in people?
 - a. Increasing calcium influx to cells resulting in cellular death
 - b. Renal afferent arteriolar constriction and partial tubular obstruction
 - c. Inhibiting phosphodiesterase III enzyme activity
 - d. Increasing intracellular adenosine triphosphate (ATP)