

1. Which protein primarily facilitates the binding of midazolam to plasma proteins in canines?
  - a. globulin
  - b. fibrinogen
  - c. albumin
  - d. ceruloplasmin
  
2. Which local block would be the best choice for a dog having an upper canine extraction?
  - a. mental
  - b. mandibular
  - c. auriculotemporal
  - d. infraorbital
  
3. Which is a complication associated with IPPV (intermittent positive pressure ventilation)?
  - a. decreased cardiac output
  - b. reduced blood oxygen levels
  - c. elevated mean arterial pressure
  - d. increased lung compliance
  
4. What is the primary cause of decreased renal blood flow in geriatric patients?
  - a. reduction of ADH
  - b. decrease in cardiac output
  - c. aldosterone loss
  - d. decrease in hepatic function
  
5. Which of the following occurs during depolarization (phase 0) of the cardiac myocyte?
  - a. The magnesium channels open increasing magnesium permeability.
  - b. The potassium channels open increasing potassium permeability.
  - c. The calcium channels open increasing calcium permeability.
  - d. The sodium channels open increasing sodium permeability.

#### Clinical competency

1. A 12 kg patient requires a metoclopramide CRI. The concentration of metoclopramide is 5mg/mL. The dose rate of metoclopramide is 2mg/kg/24 hours. The fluid rate is 25 mL/hour. 800 mL is left in the LRS bag. How much metoclopramide should be added to the LRS bag and what is the mg/hour administered? Show your calculations. (4 points)
  
2. Name 2 locoregional blocks that are appropriate for a right TPLO procedure (2 points).
  - a. Describe the steps for performing the first block IN DETAIL including materials and preparation (5 points).
  - b. Describe the steps for performing the second block IN DETAIL including materials and preparation (5 points).

3. List 4 physiologic response mechanisms by which the body normally controls temperature.  
(4 points)