Pediatric Anesthesiology Examination Sample Items

1. A 5-year-old girl requires a craniotomy for subarachnoid hemorrhage following a motor vehicle collision. Which of the following parameters is consistent with a postoperative diagnosis of syndrome of inappropriate antidiuretic hormone secretion (SIADH)?
   A. Serum osmolality 300 mOsm/L
   B. Serum sodium 128 mEq/L
   C. Urine sodium < 20 mmol/L

2. A 1-week-old infant develops pulmonary hypertension following repair of a congenital diaphragmatic hernia. Which of the following lab findings is MOST likely to be a contributing factor to this patient's hypertension?
   A. PaCO₂ 50
   B. pH 7.50
   C. PaO₂ 150 mmHg

3. A 3-week-old neonate is brought to the emergency department because of a three-day history of intermittent vomiting. His mother reports that he has not urinated for eight hours. On physical examination, his eyes are sunken. Which of the following will MOST likely require correction before surgery is performed?
   A. Hypochloremia
   B. Hyperkalemia
   C. Hypernatremia

4. A 2-month-old premature infant born at 30 weeks gestation is scheduled for an inguinal hernia repair. Which of the following preoperative findings would BEST predict an increased risk of postoperative apnea?
   A. Hemoglobin 7 gm/dL
   B. Glucose 61 mg/dL
   C. Room air SpO₂ 92%

5. An infant with gastroschisis is MORE likely than one with an omphalocele to have which of the following conditions?
   A. Congenital heart disease
   B. History of prematurity
   C. Imperforate anus
Answer Key

1. B
2. A
3. A
4. A
5. B