

Name: \_\_\_\_\_

UFID#: \_\_\_\_\_

## **PHA 5127**

### **Final Exam**

**Fall 2007**

On my honor, I have neither given nor received unauthorized aid in doing this assignment.

---

Name

**Please transfer the answers onto the bubble sheet. The question number refers to the number on the bubble sheet. Please fill in all the information necessary to identify yourself. The proctors will also collect your exams.**

**GOOD LUCK.**

Name: \_\_\_\_\_

UFID#: \_\_\_\_\_

**Question 1:** Select the **correct** statement(s) concerning a two-compartment body model. (5pts)

1. For a two-compartment-body model drug, the rate constant describing the elimination of the drug from the central compartment ( $K_{10}$ , quantifying urinary and/or metabolic elimination) is larger number than beta,
2. The bi-exponential concentration time-profile, is due to the fact that  $K_{10}$  changes over time.
3.  $V_{d_{ss}}$  is smaller than  $V_{D_c}$
4. Let us assume that the toxicity of aminoglycosides is related to the drug-concentration in a deep peripheral compartment into which the drug enters and leaves very slowly. Drug toxicity will be observed immediately after an iv bolus of this aminoglycoside.

The **correct** statement(s) is (are):

- A: 1
- B: 2 and 3
- C: 1 and 4
- D: 1 and 3
- E: 1, 2 and 3

Name: \_\_\_\_\_

UFID#: \_\_\_\_\_

**Question 2:**

Select from the following statements the **correct** statement(s) (5pts)

1. For a sustained release formulation (drug shows flip-flop kinetics), the time to reach steady state depends on the rate of release.
2. The time to reach steady state is determined by the half-life of the drug.
3. The time to reach steady state is affected by clearance and volume of distribution.
4. Time to reach steady state depends on the dosing interval.

A: (1, 2, 3, 4)

B: (1, 2, 4)

C: (1, 3)

**D: (1, 2, 3)**

E: (2, 3)