

**Homework 5**

**Bio pharmaceutics & Pharmacokinetics/PHAR434**

**Instructor Abdullah Rabba**

**Student name and I.D Muhammad Musleh /1162595**

**The data in Table 16-22 represent the average findings in antibiotic plasma samples taken from 10 humans (average weight 70 kg), tabulated in a 4-way crossover design.**

**A.Which of the four drug products in Table 16-22 would be preferred as a reference standard for the determination of relative bioavailability? Why?**

**B. From which oral drug product is the drug absorbed more rapidly?**

**C. What is the absolute bioavailability of the drug from the oral solution?**

**D. What is the relative bioavailability of the drug from the oral tablet compared to the reference standard?**

**E. From the data in Table 16-22, determine:**

 **(i) Apparent *VD***

 **(ii) Elimination *t1/2***

 **(iii) First-order elimination rate constant *k***

 **(iv) Total body clearance**







