

FINAL EXAM OF PHARMACOLOGICAL FOR 1997 EM STUDENTS (A)

NAME _____ NUMBER _____ RECORD _____

1. Choice Questions (40 points)

Type A

1. The bioavailability is

- A. the quantity of drug absorbed after oral administration
- B. the rate of drug absorbed after oral administration
- C. the ratio of AUC(oral)/AUC(intravenous)
- ~~C. the ratio of AUC (intravenous)/AUC(oral)~~
- D. the area under curve of oral administration
- E. the area under curve of intravenous administration

2. Which of the following administrations would immediately reach the plateau concentration?

- A. Decreasing dose and increasing times of administration
- B. Decreasing administering interval
- C. Increasing administering interval
- D. Administration of loading dose
- E. Frequent administration by iv

3. The maximal effect of a drug is called

- A. potency
- B. efficacy
- C. affinity
- D. toxic effect
- E. margin of safety

4. If the stomach juice pH is 1.4 and plasma pH is 7.4, how much is the drug concentration ratio of plasma to stomach juice for a weak acidic drug with pKa 5.4 when the distribution reach to equilibrium?

- A. 50
- B. 100
- C. 1000
- D. 10000
- E. 0.1

5. The equation of apparent volume of distribution (Vd) is

- A. $Vd = A \text{ (mg)}/C \text{ (mg/l)}$
- B. $Vd = C \text{ (mg/l)}/A \text{ (mg)}$
- C. $Vd = AUC \text{ (iv)}/AUC \text{ (po)}$
- D. $Vd = AUC \text{ (po)}/AUC \text{ (iv)}$
- E. $Vd = A \text{ (mg)} \cdot C \text{ (mg/l)}$

6. The pharmacological mechanism of side action is

- A. overdose
- B. low in selectivity
- C. hypersensitivity
- D. administration of drug for a long time
- E. low in patient's liver and kidney function

7. The half-life of a drug is 2 hours, how much is the K?

- A. $0.1 \text{ (h}^{-1}\text{)}$
- B. $0.2 \text{ (h}^{-1}\text{)}$
- C. $0.3 \text{ (h}^{-1}\text{)}$
- D. $0.35 \text{ (h}^{-1}\text{)}$
- E. $2 \text{ (h}^{-1}\text{)}$

8. Which of the following drugs would be used to treat myasthenia gravis?

- A. Atropine
- B. Neostigmine
- C. Acetylcholine
- D. Scopolamine
- E. Carbachol

9. The effects of pilocarpine are

- A. miosis and decreasing intraocular pressure
- B. mydriasis and decreasing gland secretion
- C. mydriasis and increasing the gland secretion
- D. miosis and increasing the intraocular pressure
- E. miosis and paralysis of accommodation

10. The drug choice in the treatment of anaphylactic shock is

- A. glucocorticoids
- B. antihistamine drugs
- C. norepinephrine
- D. adrenaline