

PART I CHOICE QUESTIONS (50)

TYPE A

- The drug able to penetrate brain barrier is a compound with
 - high polarity
 - high lipid solubility
 - high molecular weight
 - high water solubility
 - low molecular weight
- After repeated administration, the response of the body to drugs is reduced, this phenomenon is called
 - selectivity of the drug
 - tolerance of the drug
 - dependence of the organism
 - habituation
 - neither is correct
- A weak base has $pK_a=9$; if the medium in which it is dissolved has a $pH=7$ what will be ratio of the concentrations of ionised to unionised forms of the base?
 - 100:1
 - 1:100
 - 10:1
 - 1000:1
 - 1:1
- A drug with $t_{1/2}=3$ hrs is given iv, the steady state of the plasma concentration can be expected within
 - 6 hrs
 - 9 hrs
 - 15 hrs
 - 20 hrs
 - 30 hrs
- The first-pass effect occurs most often after which route of drug administration?
 - sublingual
 - subcutaneous
 - intravenous
 - intramuscular
 - oral
- Antagonist has
 - affinity for receptors but no intrinsic activity
 - no both affinity and intrinsic activity
 - affinity and weak intrinsic activity
 - affinity and low efficacy
 - high affinity and efficacy
- PA_2 is
 - therapeutic index
 - antagonist
 - affinity index
 - dissociation constant
 - elimination rate constant
- A patient with a systemic infection is being treated with an antibiotic whose $t_{1/2}$ is 8hrs. In order to maintain the patient's total body store at 300 mg of the antibiotic, what should be?
 - 100 mg every 8 hrs
 - 200 mg every 8 hrs
 - 300 mg every 8 hrs
 - 400 mg every 8 hrs
 - 500 mg every 8 hrs
- The maximum effect (E_{max}) achieved by a drug is measure of
 - therapeutic index
 - antagonist
 - affinity index
 - dissociation constant
 - elimination rate constant