1-drug discovery & development usually starts with :
-preclinical studies on tissues and animals
- an idea or a hypothesis
-phase 0 clinical drug trials
- acute toxicity studies
-bioavailability – bioequivalence studies

2-phase 0 clinical drug trials are characterized by all of the following except :
-approved by US ,FDA and designed to speed up the development of promising drugs
-include using subtheraputic doses of a given drug to a small number of normal subject (10-15)
-provide useful data on drug's pharmacokinetics and pharmacodynamics of the drug under study
-provide good data on the safety and efficacy of the tasted drug
- considered by some drug authorities not useful and ethically un acceptable

3-which of the following is true about IV administration of drugs :
-all druges can be given by this route
-it's the safest route
- it provides rapid action & higher blood pressure
-as compared to oral route , drugs given by this route have less sides effects
-it is preferred route by most patients

4-all of the following are considered therapeutic uses to drugs , except :
-prevention of diseases
- control of diseases
-diagnosis of diseases
- produce addiction
- treatment of diseases

5-which one of the following will increase the plasma half-life of a drug :
-induction of its metabolism
- decrease in renal clearance
-decrease in apparent volume of distribution (AVD)
-shift in % bound to plasma protein from 30 to 50%
-an increase in renal blood flow

6-the following drug interferes with the renal active secretion :
-porpranolol
-lindocaine
- probenecid
-aspirin
-neostigmine

7-the major factor affecting metabolism of a drug is :
-the given dose
-route of administration
-drug size
-protein binding
- genetic factors

8-mixed-function oxidase system (cytochrome p450 path the following reactions in drug metabolism except :
-aromatic hydroxylation
-epoxidation
- acetylation
-N-dealkylation
-S-oxidation

9-regarding drug binding to plasma protein ,all of the following are true except :

-albumine is the most important drug binding protein

- binding is mostly irreversible

-α1- acid-glycoprotein is also important for binding certain basic drugs

-the free unbound drug fraction usually crosses membranes and is responsible for the pharmacological action

-the consequences of displacement from plasma protein binding site are significant only for highly bound drugs

10- the following is universal side effect to almost all drug :

-allergy

-nausea and vomiting

- headache

-fever

-dizziness

11-the least common bond between a drug and its receptor is :

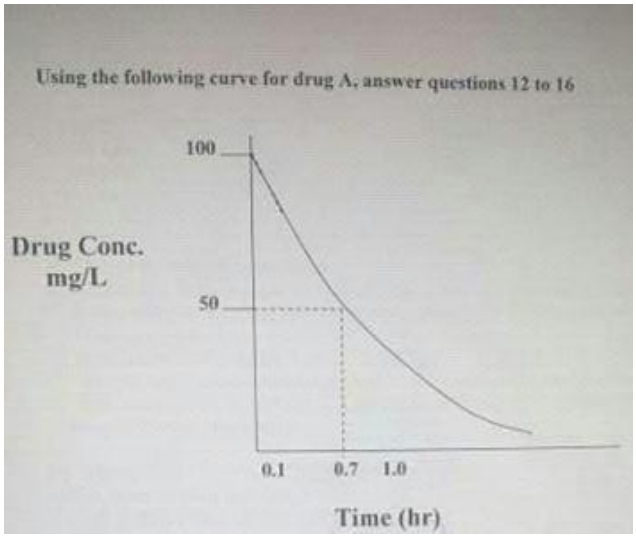
-vander waals bond

- hydrogen bond

- ionic bond

-covalent bond

-reinforeced ionic bond



12-the bioavailability of drug A is :

-5%

-10%

-25%

-50%

-100%

13-the Ke of drug A =

-0.5 hr^-1

-1.0hr^-1

-1 hr

-1.5 hr^-1

-1.5 hr

14-drug A reach steady state level in :

- 0.1 hr
- 0.7 hr
-1.0 hr
-3.5 hrs
-5 hrs

15-if 100 mg of A is given to a patient , then its AVD =

-1.0L
-2.0L
-1.0mL
-2.0mL
- >5L

16- taking in consideration the above Q.s , the clearance of A=

-0.1 L
-0.1 L/hr
-1.0 L/hr
-1.0hr/L
- 0.1 hr

17-choose wrong statement :

-tolerance is the resistance developed to the effect of a given dose of drug
-cummulation occurs when the rate of elimination (Km+Ke) of a drug exceeds the rate of absorption
-habitation is a psychic carving for a drug
-idiosynchracy is a genetically determined an unusual response to a drug
-synergism occurs when the combined action of 2 drugs is greater than the sum of the individual action

18-which of the following is true for drug affinity :

-increase as ED50 increase
- lower for a partial agonist than a strong agonist
-refer to the number of drug molecules which combine with receptor site
-its magnitude is a measure of the strength of the bond between drug &receptor
-its magnitude is a measure of the maximal response expected when a drug binds to receptor

19-first pass effect means :

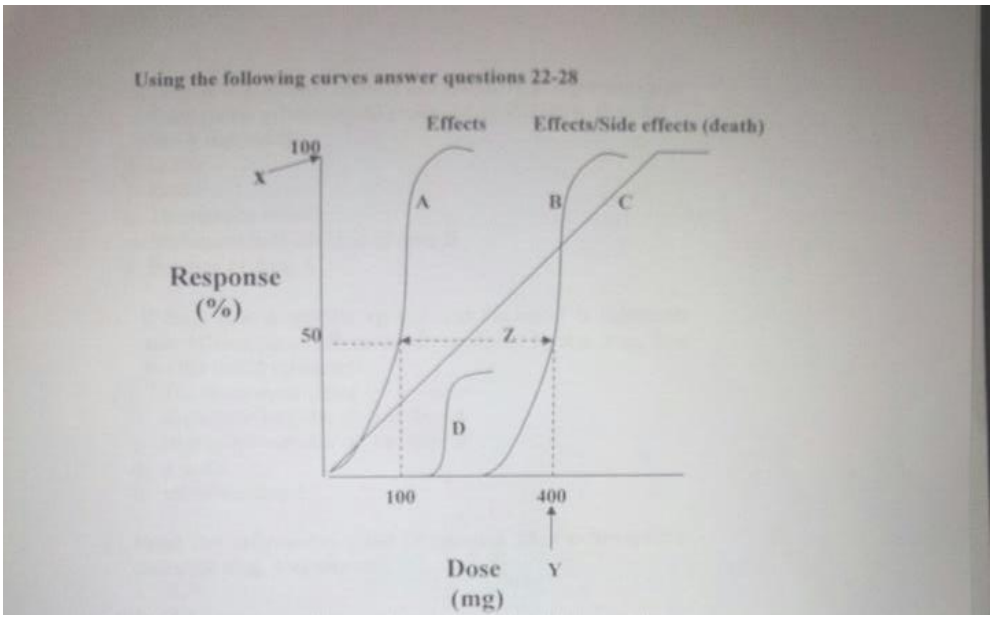
-tachyphylaxis
-rapid metabolism
-rapid absorption
- rapid excretion
- bioavailability

20-specific receptor antagonist can best be described as having :

- efficacy but little or no affinity for the receptor
-both efficacy and affinity for the receptor
-affinity but little or no efficacy for the receptor
-neither affinity nor efficacy for the receptor
-none of the above

21-Ach is not useful as therapeutic agent , because :

- it has no therapeutic indications
-it's very short acting
-it can cause cardiac standstill
-it's very rapidly hydrolyzed by cholinesterase enzyme
-all of the above



22-if drug A is a specific agonist and drugs B and C are analogs producing nearly similar effects to A , choose the correct statement :

- A is more potent than B

-A is safer than drug C

- A is more potent than C

- a and c are correct

-all of the above are correct

23-if A is a specific agonist and B and C are analogs producing nearly similar effect to A , choose the correct statement :

-D is less efficacious than A

-A is more efficacious than B

-A & C have similar efficacy

-a and c are correct

-all of the above are correct

24- X represent :

-intrinsic activity

-potency

-tolerance

-steady state level

-drug concentration at time zero

25- if drug A is a specific agonist and the curve B represents side effects produced by this drug , then the point Y represents :

-LD50

-ED50

-therapeutic index

- biological half life Of drug B

- potency of A

26- if drug A is a specific agonist and the curve B represents side effects produced by this drug , then the line Z represents :

--therapeutic index

- biological half life Of drug A

- biological half life Of drug B

-a and c

- all of the above

27- from the formation given by Q.25 , the therapeutic index of drug A =

-0.25

-0.4

-1.0

-2.0

-4.0

28- if drug A is a specific agonist and B represent its response in presence of specific antagonist then the above curves represent an example of :

-non-competitive antagonist

- competitive antagonist

-synergism

-addition

-potentiation

29-the only choline ester which can have therapeutic application is :

-Acytelcholine

-methacholine

-bethanechol

-carbachol

-pilocharpine

30-the main reason why nicotine is considered toxic compound is because it :

-stimulates all parts of the ANS

-can kill insect

-stimulates the heart and constricts the arteries

-stimulates the dopameniergic – reward system in the ventral tegument

-can cause nausea and vomiting

31-all of the following about varnicline are true , except :

- it is a partial nicotine agonist

- it is highly effective in supporting smoking cessation

-may be associated with psychiatric symptoms , including suicidal ideation

-it is used as a skin patches

- may be more effective than nicotine patch in smoking cessation

32-the serious toxicity of organophosphorous compounds is due to :
- high lipid solubility
-covalent bond to the receptors
-accumulation of large amount of ACH at the synapse
-excessive secretion
-all of the above

33-mushrom poisoning is characterized by all , except :
-sever tachycardia
- bronchospasm
-meiosis
-profuse sweating
-intestinal cramps

34-atropine might be highly effective in the treatment of organophosphate poisoning because all of the following except:
-it can cross the BBB
-it decrease the secretion
-large dose will cause less serious toxicity
-blocks the muscarinic receptors
-disassociate the organophosphate from the enzyme

35- feature of atropine poisoning include all of the following except :
-hallucination
-hypothermia
-mydriasis
-dry mouth
- coma

36-the first and the most characteristic side effect of atropine that occurs at low doses :
- tachycardia
-dry mouth
-difficulty with micturation
-bulerred vision
-dilirium

37-the best antidote used to treat atropine poisoning is :
-pyridostigmine
-neostigmine
-physostigmine
-ambenonium
-edrophonium

38-scopolamine is useful drug in the management of motion sickness because of all of the following features except :
- is a quaternary amine
-can be formulated as skin patch
-has a sedative and some amnesic activity
-has long duration of action
- an effective drug and known for long period of time

39-all of the following are true for ipratropium , except :
-is a synthetic analog of atropine
-has local effect with minimal systemic effect
-effective in all types of bronchial asthma
-given by inhalation , short acting
-tiotropium is a closely related drug but with longer duration of action

40-all of the following are true about cholinergic and anti- cholinergic drugs in the urinary system , except :

-mediated through M2 receptor

-bethanechole is useful in bladder atony

- atropine like drug e.g oxybutinin are effective in the treatment of urinary urgency

-botulinum toxin is an alternative to atropine like drugs , longer acting

-all these agents should not be used in the presence of obstruction

your sister : Israa abu haneih

good luck ☺