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Paper : Pharmacology
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Q1:select and highlight appropriate option for given question.

1.In the process of metabolism introducing the polar functional group into molecule may_____ the pharmacological activity of drug.
a. Increase
b. Decrease
c. No change
d.All of the above

2.Drugs having the properties of_____ may have prolong half life.
a. Hydrophobic
b. Pass from enterohepatic circulation
c. Both (a) & (b)
d. None of the above

3.Rapid signal transmission and processing occur through
a. G protein coupled receptor
b. Ligand-gated receptor
c. Enzyme linked receptor
d. Intracellular receptor

4.Which of the following statement is not true.
a. Mechanistically, every drug can illicit its action via enzymes, ion channels, transporter, receptors
b. Majority of drug show its effects by interacting with its target biomolecules
c. The targeted biomolecules for initiating drug action are proteins in nature
d. Mechanism of drug action always depends on its selectivity

5.The therapeutic index represents as estimate of the____of a drug,because a very safe drug might be expected to have a very large toxic dose and a much smaller effective dose.
a. Efficacy
b. Safety
c. Toxicity
d. Both a & b

6.Which of the following statement is incorrect.
a. Oral drug administration is easy to self administer
b. In emergency situation best choice of drug administration is I/M
c. Drugs with poor penetrability is usually administered through I/V
d. Inhalation mean administration through mouth in small, atomized droplets form.

7.Signals to the skeletal muscles are controlled by
a. G protein receptors
b. Second messenger system only
c. Nicotine receptors
d. None of the above

8.Every drug follows same path/phases of metabolism such as
a. Only one phase at a time
b. Phase I followed by phase II
c. Phase II followed by phase I
d. Depending upon chemical nature of drug
e. Both a & b

9. Which of the following statement is the false one.
a. Majority of drugs are equally eliminated via urine and feases
b. Nephron is the structural and functional unit of kidney
c. Only appropriately metabolized can be eliminated efficiently by kidneys
d. If kidneys failed to eliminate then workload is eased by intestinal route

10.Degradative enzymes of GI tract cause drugs to denature which in turn lower its
a. Absorption
b. Distribution
c. Bioavailability
d. Both a & b
e. All of the above

11.Which receptor require preliminary formation of ligand bonding that lead to moveable complex
a. Enzyme linked receptors
b. Ligand gated ion channels
c. Intracellular receptors
d. G protein coupled receptors.

12.A patient having certain type of interaction showed altered_____
a. Biological half life
b. Biological effect half life
c. Plasma half life
d. All of the above

13.Drug distribution of any class of drug can be determined in term of____
a. Hydrophilicity
b. Molecular weight
c. Hydrophobicity
d. Plasma proteins binding
e. All of the above

14.Which of the following statement is not related to exact principle of drug action.
a. Treatment of low heart rate by giving adrenaline
b. Treatment of acidity with omeprazole
c. Treatment of diabetes by giving insulin as external hormone
d. Treatment cancer by giving them genetic therapy
e. All are true

15. Which of the following directly alter membrane potential
a. Enzyme
b. Transporter
c. Ion linked channels
d. All of the above

Q2: Select and highlights true and false for the given statements

1. Clinical pharmacology includes the investigation of drug,s efficacy and safety in various form of subjects. **(True)**

2.Drug X shows its action by releasing cholinergic neurotransmitter, due to large particulate nature its release will occur through endocytosis. **(False)**

3.Drug metabolism in human usually results in a products that is more lipid soluble than the original drug **(False)**

4.Various doses, dosage form and frequency is adjusted in pharmacotherapeutics. **(True)**

5.In passive diffusion, aqueous soluble drugs cannot move easily across cell membrane.**(False)**

6.A patient is administered with drug A started toxic reaction but that drug is slowly metabolized by enzyme, he/she should be treated with cimetidine to overome toxicity**. (True)**

7.In enterohepatic circulation, reactivated metabolities comes from the metabolism via enzymes other than CYP P450.**(True)**

8.Drug A is hydrophobic in nature and having high plasma proteins binding are likely to distributed effectively to the target organ**.(False)**

9.A patient has some allergic reaction to the drug A, for avoiding any adverse reaction he administered drug B with some desired properties, both of the drug therapeutically equivalent. **(False)**

10.Different dosage form of same therapeutic class of drug will always effect the time to achieve peak plasma concentration. **(True)**

11.In case of drug action, preliminary bonding of drug with specified receptor will always lead to alteration of receptor,s structure. **(True)**

12.Mechanistically, every drug can illicit its action via enzymes, ion channels, transporters, receptors.**(True)**

13.As compared to other recetors, intracellular receptors take long for initiating its effect **(True)**

14.Depending upon the nature of ligand, majority of drugs interact with receptors that are present across the cell membrane.**(True)**

15.Various subunits of second messenger system of G-proteins is always linked other receptors i.e.intracellular receptors, enzymes or ion linked channels**.(True)**