



Questions Bank

Pharmacology of autonomic nervous system

Q1\ fill in the blanks :

- 1-The autonomic nervous system classified into -----,-----,-----
- 2- Parasympathetic neurons: the parasympathetic preganglionic fibers arise from the -----and from -----.
- 3- Functions of the sympathetic nervous system response to -----, such as -----,-----,-----,-----.
- 4- Functions of the parasympathetic division maintains -----, such as -----and -----.
- 5- The somatic nervous system is under -----control,whereas the autonomic is an -----.
- 6- Types of neurotransmitters in sympathetic nervous system are-----,-----while in parasympathetic is -----.
- 7- Neurotransmission in cholinergic neurons involves sequential six steps-----,-----,-----,-----,-----,-----.
- 8- Types of cholinergic receptors -----,-----,-----,-----,-----.
- 9- Direct-Acting Cholinergic Agonists :-----,-----,-----,-----.
- 10- Reactivation of Acetylcholine esterase -----.
- 11-Acetylcholine therapeutically no importance because-----,-----
- 12-Therapeutic use of Pilocarpine -----.
- 13- Stages of anesthesia1 -----,2-----3-----,4-----.

Q2// Enumerate the indirect acting of cholinergic agonists .

Q3// The mechanism action of Organophosphates compounded.

Q4// Enumerate the anti-muscarinic agents.

Q5// List the following :-

1- Drugs that dilate blood vessels by acting directly on smooth for treatment hypertensive

2- Site and Mechanisms of Actions of Diuretics

3- toxicity of digitalis.

4- therapeutic goal for heart failure

5- inotropic drugs for heart failure

6-aim of drugs treatment Angina with example

7- the aim uses diuretics for heart failure and hypertensive

Q6// write mechanism of action of the following drugs:- (lasortan,

ACE inhibitors hydralazine, organic nitrets)

Q7// write short Brief Assay about the follwing sentence.

1-metabolism drugs can be altered by effect on liver microsomal enzymes.

2- IV injection 100% Bioavailability

3-treatment with smoking are associated with decreased drug level in blood

4-the aim uses Thiazide diuretics, For hypertensive & heart failure

5-organic nitrates action for Angina treatment with Adverse effects

6-Distribution of an absorbed drug in the body depends on protein binding

7-explain the influence of PH on the dissociation characteristics of weak acids & weak bases

8- metabolism drugs can be altered by effect on liver microsomal enzymes.

9-the aim uses adrenoceptor blocking agents for Angina & hypertensive ?

Q8// differentiate between the following :-

1-enzyme induction & enzyme inhibition

2-Tolerance & Tachyphylaxis

3- antiplatelet drugs

4- fibrinolysis drugs & (mechanism of action).

Q9// Identify the following drugs

<u>drugs</u>	<u>Action</u>
Prazosin	Nicotinic blockers
clonidine	ACE inhibitors
trimethphan	alpha 1 selective blocker agents
hydralazine	Deplete catecholamine stores in the peripheral and central N.S
Captopril	acts through the release of nitric oxides
Reserpine	α 2-selective agonists

Q10// Q1-define the following :- (pharmacokinetic, Half- life ($t_{1/2}$), Steady - state drug, Tolerance, Efficacy)

Q11// short Assay(2-only):-

1-What is volume of distribution & How is the volume of distribution of drugs related to its Distribution from plasma.

2-What is the absorption of drug & effect of PH on the drug absorption.

3-What is drug metabolism & general sets of reactions of metabolized in the liver.

4-Receptor & Sites of drug actions.

Q12-Mechanism action of the following agents :(Echothiophate ,pirenzepine, Pralidoxime, Organophosphates compound ,Neostigmine , Carbachol).

Q13-Enumerate the therapeutic uses of the following: (Bethanechol, carbachol , Echothiophate, Pralidoxime, Darifenacin,Neostigmine).

Q14-Enumerates the CNS Stimulant drugs. Mechanism action of amphetamine and adverse effects .

Q15-Enumerates the Anticonvulsant drugs ,Mechanism action and adverse effects.

Q16-The adverse effects of (Propranolol ,Norepinephrine, Atropine).

Q17-The mechanism of action of the (Prazocin ,Mecamylamine atenolol, tubocurarin, Guanethidine, Reserpine.) .

Q18-Therapeutic uses of the (Yohimbineine ,Phenoxybenzamine, Scopolamine, Succinylcholine, Labetalol).

Q19-Types of adrenergic and cholinergic receptors.

Q20- Essential characteristic of ideal general anesthesia.

Q21-Classification of the general anesthesia.