



- Notes :
1. All questions are compulsory, draw the diagram wherever necessary.
 2. All questions carry equal marks.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. Multiple choice questions.**10x2
=20**

- What the drug does to the body is called as.....
 - a) Pharmacokinetics
 - b) Pharmacodynamics
 - c) Bioavailability of drugs
 - d) Pharmacology
- Unusual, bizarre or unexpected drug effect.....
 - a) Idiosyncrasy
 - b) Allergy
 - c) Tachyphylaxis
 - d) Tolerance
- In case of G_i type of GPCR receptor.....
 - a) Adenylyl cyclase activity decreased and K^+ channels opens.
 - b) Adenylyl cyclase activity increased and K^+ channel closed
 - c) Phospholipase C increased
 - d) Na^+/H^+ Exchange
- Which of the following is not principle of drug action
 - a) Stimulation
 - b) Depression
 - c) Replacement
 - d) Modification of Physiological system
- Acetylcholine neurotransmitter binds to receptor site
 - a) Nicotinic receptor
 - b) Muscarinic receptor
 - c) both (a) and (b)
 - d) None of the above
- β_3 receptor site mainly present in.....
 - a) Heart
 - b) Adipose tissues
 - c) Kidney
 - d) Lungs
- MAO inhibitors in general raise the brain level of
 - a) Dopamine
 - b) Serotonin
 - c) Nor adrenaline
 - d) All of the above
- Phase 0 of clinical trial is also known as
 - a) Micro dosing
 - b) drug excretion only
 - c) ADRs testing
 - d) Post marketed surveillance

- ix) The most effective single drug in Parkinsonism is
- | | |
|------------------|---------------|
| a) Bromocriptine | b) Selegiline |
| c) Levodopa | d) Biperiden |
- x) Plasma concentration is useful for
- | | |
|---------------------------------|---------------------------------|
| a) Drug with high safety margin | b) Drugs with low safety margin |
| c) Drug activated in the body | d) Hit and run drugs |
- xi) The duration of action of drugs is dependent of its.....
- | | |
|-------------------------------------|---------------------|
| a) Plasma and tissue binding | b) Metabolism |
| c) Tubular filtration and secretion | d) All of the above |
- xii) A drug that binds to a cell receptor and block a responses is called an
- | | |
|--------------------|----------------------|
| a) Partial agonist | b) Antagonist |
| c) Agonist | d) None of the above |
- xiii) All of the following sub serve as intracellular second messengers in receptor mediated signal transduction except-
- | | |
|--------------------|--------------------------|
| a) Cyclic AMP | b) Inositol triphosphate |
| c) Diacyl glycerol | d) G protein |
- xiv) Substance secreted into the blood by a neuron is
- | | |
|-------------------|---------------------|
| a) Neurohormone | b) Neuromodulator |
| c) Neuromodulator | d) Neurotransmitter |
- xv) Increase the influx of cations (Na⁺) into the cell is states-
- | | |
|-------------------|----------------------|
| a) Depolarization | b) Repolarization |
| c) Polarization | d) Hyperpolarization |
- xvi) Drug administered through the following route is most likely to be subjected to first-pass metabolism
- | | |
|-----------------|---------------|
| a) Oral | b) Sublingual |
| c) Subcutaneous | d) Rectal |
- xvii) CNS stimulant agents belong to
- | | |
|---------------------------|---------------------------|
| a) Respiratory stimulants | b) Psychomotor stimulants |
| c) Psychomimetic agents | d) All of the above |
- xviii) Which of the following is a neurotransmitter in the central nervous system
- | | |
|------------------|---------------------|
| a) Acetylcholine | b) Noradrenaline |
| c) Dopamine | d) All of the above |
- xix) Constriction of pupil size is known as
- | | |
|------------|----------------------|
| a) Miosis | b) Mydriasis |
| c) Mitosis | d) None of the above |
- xx) Atropine is antagonist to which type of muscarinic.
- | | |
|-------|-------|
| a) M1 | b) M2 |
| c) M3 | d) M4 |

- 2. Solve any two.** **10x2**
=20
- a) Classify Anti psychotics and antidepressants with suitable examples.
 - b) What is the enzyme linked receptor? Explain about the tyrosine enzyme linked receptor signal transduction mechanism?
 - c) What is drug discovery? Explain the different preclinical evaluation phases in drug discovery.

- 3. Solve any seven.** **5x7**
=35
- a) What is myasthenia gravis? Classify drugs used in it with suitable examples.
 - b) Explain in short organization and function of autonomic nervous system.
 - c) Classify opioid analgesics. Write the pharmacology and adverse effect of morphine.
 - d) Write a short note on drug addiction, drug abuse and drug tolerance with suitable examples.
 - e) Write the classification of neurotransmitters with their function.
 - f) What is receptor? Write in detail receptor theories.
 - g) Write the classification of parasympathomimetics with suitable examples.
 - h) Explain the pharmacokinetics drug-drug interaction.
 - i) What is the role of GABA in central nervous system?
