



## BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Pharm-2019/B.Pharm-2020/B.Pharm-2021/B.Pharm-2022

Course Name – Pharmacology I

Course Code - BP404T

( Semester IV )

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) Identify the correct statement with respect of pharmacokinetics.
- a) Acidic drugs unionized at alkaline pH                      b) Basic drugs are unionized at acidic pH  
c) Basic drug ionized at alkaline pH                          d) Acidic drug ionized more in alkaline pH
- (ii) Recall the number of helixes present in G-Protein coupled receptor.
- a) Six helix    b) Three helix  
c) Seven helix    d) Five helix
- (iii) Identify the role of ion channels.
- a) Measuring the electric impulse generation              b) Balancing of fluid  
c) Measuring the conduction of heart                      d) All of these
- (iv) Identify the state for maximum movement of drug occurs across the membrane.
- a) In anionic form    b) Partially ionized  
c) Unionized    d) In cationic form
- (v) Identify the advantages of protein binding of a drug.
- a) Distribution    b) Prolonging half life  
c) Limiting metabolism    d) All of these
- (vi) Identify the route preferably given for oily injections.
- a) Subcutaneous route    b) Intramuscular route  
c) Intravenous route    d) None of these
- (vii) Select the correct option: If an agonist can produce maximal effects and has high efficacy it's called:
- a) Partial agonist    b) Antagonist  
c) Agonist-antagonist    d) Full agonist
- (viii) Explain why Acetylcholine is not used in clinical practice.
- a) It is very toxic    b) The doses required are very high  
c) It is very rapidly hydrolyzed                                d) It is very costly
- (ix) Choose the drug having both alpha as well as beta receptor antagonistic property

- a) Yohimbine  
c) Doxazosin
- b) Indoramine  
d) Labetalol
- (x) Choose the correct option: Beta blockers are contraindicated in all of the following except one
- a) Diabetes  
c) Angina
- b) Congestive heart failure  
d) Asthma
- (xi) Identify cholinesterase reactivator drugs
- a) Atropine  
c) Pirenzepine
- b) Pralidoxime  
d) Ipratropium
- (xii) Among stages of general anaesthesia 2nd stage is indicated as
- a) Analgesia  
c) Analgesia and excitement
- b) Excitement  
d) Surgical anaesthesia
- (xiii) Choose barbiturates with ultra short mode of action
- a) Thiopental  
c) Secobarbital
- b) Pentobarbital  
d) phenobarbital
- (xiv) Choose which one of the following agent potentiates the seizure formation.
- a) Phenytoin  
c) Phenobarbitone
- b) Pentylenetetrazol  
d) Carbamazepine
- (xv) Local anesthetics indicates
- a) Analgesia, amnesia, loss of consciousness  
c) Alleviation of anxiety and pain with an altered level of consciousness
- b) Blocking pain sensation without loss of consciousness  
d) A stupor or somnolent state
- (xvi) Select the correct definition of agonist.
- a) Interacts with the receptor without producing any effect  
c) Increases concentration of another substance to produce effect
- b) Interacts with the receptor and initiates changes in cell function, producing various effects  
d) Interacts with plasma proteins and doesn't produce any effect
- (xvii) Identify the feature which doesn't occur in parkinsonism
- a) Bradykinesia  
c) Fever
- b) Rigidity  
d) Variable tremor
- (xviii) Select what is true in relation to drug receptors:
- a) All drugs act through specific receptors  
c) Agonists induce a conformational change in the receptor
- b) All drug receptors are located on the surface of the target cells  
d) Partial agonists have low affinity for the receptor
- (xix) Myasthenia Gravis is primarily caused by:
- a) Genetic mutations  
c) Viral infections
- b) Autoimmune dysfunction affecting neuromuscular junction  
d) Metabolic disorders
- (xx) Neuromuscular blocking agents act primarily at the:
- a) Presynaptic membrane  
c) Neuromuscular junction
- b) Postsynaptic membrane  
d) Dendrites

### Group-B

(Short Answer Type Questions)

5 x 7=35

2. State the factors modifying drug action. (5)
3. Describe the phases of clinical trials. (5)
4. Discuss about the different types of parenteral route of drug administration. (5)
5. Explain the mechanism of action of disulfiram. (5)

6. Write down the mechanism of action of local anesthetics. (5)

7. Write a short note on myasthenia gravis. (5)

OR

Illustrate the types of epilepsy and mention the adverse effect of phenobarbitone. (5)

8. Classify antidepressant drugs with example. (5)

OR

Classify anti-anxiety drugs with example. (5)

**Group-C**

(Long Answer Type Questions)

10 x 2=20

9. Classify cholinergic drugs and show the biosynthesis of Acetylcholine with a proper diagram. (10)

10. Define parkinsonism and classify the drugs with example that are used to treat parkinsonism. (10)

OR

Illustrate the treatment strategy for status epilepticus. (10)

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Pharmaceutical Technology  
Barun, e University  
Barusat, J. J. ca-700125