



14148

**BRAINWARE UNIVERSITY**

Library
Pharmaceutical Technology
Brainware University
Barasat, Kolkata-700125

Term End Examination 2024-2025**Programme – B.Pharm-2020/B.Pharm-2021/B.Pharm-2022/B.Pharm-2023****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 factor which leads to less rapid distribution.
 - a) Decreased blood supply
 - b) Increased blood supply
 - c) Decreased plasma protein binding
 - d) None of these
- (ii) Determine the agent with prominent effect on manic disorder.
 - a) Carbamazepine
 - b) Lithium carbonate
 - c) Verapamil
 - d) Gabapentin
- (iii) Choose the analgesic drug whose effects are resistant to reversal by naloxone.
 - a) Nalbufine
 - b) Levorphanol
 - c) Dezocine
 - d) Buprenorphine
- (iv) Identify the correct term for the following statement: 'Mechanism of drug action is named as:'
 - a) Pharmacokinetics
 - b) Pharmacogenetics
 - c) Pharmacoeconomics
 - d) Pharmacodynamics
- (v) Identify one of the following that is a not G-protein coupled receptor.
 - a) Ach-Nicotinic
 - b) Beta- adrenergic
 - c) GABA-A
 - d) 5-HT₂
- (vi) Select the second messenger of G-protein-coupled (metabotropic) receptor.
 - a) Adenyl cyclase
 - b) Sodium ions
 - c) Phospholipase C
 - d) cAMP
- (vii) Select the phase at which NDA is submitted to the licensing authority.
 - a) Phase-0
 - b) Phase-III
 - c) Phase-I
 - d) Phase-II
- (viii) Identify the correct option: a good local anesthetic agent shouldn't cause _____.
 - a) Local irritation and tissue damage
 - b) Systemic toxicity
 - c) Fast onset and long duration of action
 - d) Vasodilatation

- (ix) Choose the drug having both alpha as well as beta receptor antagonistic property
- | | |
|--------------|---------------|
| a) Yohimbine | b) Indoramine |
| c) Doxazosin | d) Labetalol |
- (x) Choose the long acting, high efficacy injectable local anesthetics drugs
- | | |
|---------------|---------------|
| a) Procaine | b) Lignocaine |
| c) Prilocaine | d) Tetracaine |
- (xi) Select the correct definition of half life ($t_{1/2}$).
- | | |
|---|---|
| a) Metabolize a half of an introduced drug into the active metabolite | b) Change the amount of a drug in plasma by half during elimination |
| c) Absorb a half of an introduced drug | d) Bind a half of an introduced drug to plasma proteins |
- (xii) Choose the antiepileptic agents out of the following that act via sodium channel except _____.
- | | |
|---------------|----------------|
| a) Vigabatrin | b) Phenytoin |
| c) Valproate | d) Lamotrigine |
- (xiii) Choose the drug not included in selective serotonin reuptake inhibition.
- | | |
|---------------|---------------|
| a) Fluoxetine | b) Sertraline |
| c) Citalopram | d) Trazodone |
- (xiv) Select the parenteral route of medicinal agent administration.
- | | |
|---------------|---------------|
| a) Rectal | b) Oral |
| c) Sublingual | d) Inhalation |
- (xv) Select which of the following is not an example of prodrug.
- | | |
|---------------|-----------------|
| a) Levodopa | b) Enalapril |
| c) Omeprazole | d) Indomethacin |
- (xvi) Identify during which phase a NDA is submitted to the licensing authority.
- | | |
|------------|--------------|
| a) Phase-0 | b) Phase-III |
| c) Phase-I | d) Phase-II |
- (xvii) Recall the full form of CDSCO.
- | | |
|--|--|
| a) Central drugs standard control organization | b) Committee of drug standard control organization |
| c) Central drugs standard committee organization | d) None of these |
- (xviii) Select which of the following drug metabolizing reaction is entirely non-microsomal.
- | | |
|----------------------------|----------------|
| a) Glucuronide conjugation | b) Acetylation |
| c) Oxidation | d) Reduction |
- (xix) Select Beta-1 adrenergic receptors primarily affect which organ?
- | | |
|------------------|---------------------|
| a) Lungs | b) Heart |
| c) Blood vessels | d) Digestive system |
- (xx) Identify the type of receptor is stimulated by acetylcholine in the parasympathetic nervous system?
- | | |
|-------------------------|---------------------------|
| a) Alpha receptors | b) Beta receptors |
| c) Muscarinic receptors | d) Dopaminergic receptors |

Group-B

(Short Answer Type Questions)

5 x 7=35

- | | |
|---|-----|
| 2. Discuss about the different types of parenteral route of drug administration. | (5) |
| 3. Define plasma half-life. | (5) |
| 4. Define sympathomimetic drugs and classify with examples. | (5) |
| 5. Write a short note on opioid analgesics and antagonist. | (5) |
| 6. Describe the different carrier mediated membrane transport. | (5) |
| 7. Illustrate the types of epilepsy and mention the adverse effect of phenobarbitone. | (5) |

OR

Explain the mechanism of action of drugs used in the treatment of Parkinson's disease. (5)

8. Classify antipsychotic drugs with example. (5)

OR

Classify antidepressant drugs with example. (5)

Group-C

(Long Answer Type Questions)

10 x 2=20

9. Illustrate about skeletal muscle relaxant and write their mechanism of action. (10)

10. Define dementia and classify the drugs for Alzheimer's disease along with MOA of any one drug to treat Alzheimer's disease. (10)

OR

Define depression and classify antidepressant drugs along with the MOA of serotonin reuptake inhibitors. (10)
