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**BRAINWARE UNIVERSITY**

Library
Pharmaceutical Technology
Brainware University
Barasat, Kolkata-700125

Term End Examination 2024-2025**Programme – D.Pharm-2023/D.Pharm-2024****Course Name – Pharmaceutical Chemistry - Theory****Course Code - ER20-12T****(Year I)****Full Marks : 80****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 reasons for the impurities in pharmaceutical preparations.
- | | |
|-------------------------|--------------------------|
| a) Raw Materials | b) Manufacturing Process |
| c) Chemical Instability | d) All of these |
- (ii) Identify the test on which Limit test for Arsenic is based.
- | | |
|-------------------|------------------|
| a) Gutzeit test | b) Fehlings test |
| c) Benedicts test | d) None of these |
- (iii) Identify correct answer: In limit test for arsenic, what is converted to arsenious acid/arsine gas?
- | | |
|-------------------|------------------|
| a) Arsine | b) Arsenide |
| c) both (a) & (b) | d) None of these |
- (iv) Identify correct answer: Increased level of carbon dioxide in blood leads to.
- | | |
|-------------------|------------------|
| a) Acidosis | b) Alkalosis |
| c) both (a) & (b) | d) None of these |
- (v) Select the five membered sulphur contain heteroaromatic rings.
- | | |
|------------|---------------------|
| a) Furan | b) Thiophene |
| c) Pyrrole | d) All of the above |
- (vi) Identify correct answer: Brand names of Isosorbide dinitrate.
- | | |
|------------|----------------------|
| a) Anzidin | b) Cardicap |
| c) Olvisol | d) All of the these. |
- (vii) Identify correct answer: Which of the following is Potassium sparing diuretic?
- | | |
|-------------------|---------------|
| a) Spironolactone | b) Bumetanide |
|-------------------|---------------|

- c) Frusemide
(viii) Identify correct answer: Which of the following is thiazolidinediones class of orally active hypoglycaemic agent?
a) Glibenclamide
b) Glimepiride
c) Pioglitazone
d) Repaglinide
- (ix) Select the correct option: Neuroleptics also known as.
a) Antipsychotics
b) Anticonvulsant
c) Cholinergics
d) None of these
- (x) Select the correct option: 5,5-Diphenylimidazolidine-2,4-dione is the other name of _____.
a) Diazepam
b) Thiopental sodium
c) Mephenytoin
d) Phenytoin
- (xi) Identify the correct option: Adrenergic drugs also known as _____.
a) Sympathomimetic agents
b) Parasympathetic
c) Adrenergic antagonist
d) None of these
- (xii) Select the correct option: These drugs inhibit adrenergic responses mediated through the β -receptors.
a) Beta adrenergic blockers
b) Adrenergic antagonist
c) Direct acting
d) Both (a) and (b)
- (xiii) Identify the correct option: Which of the following drug is a beta blocker class?
a) Spironolactone
b) Propranolol
c) Frusemide
d) All of these
- (xiv) Identify the correct option: Isoflurane belongs to which class of general anesthetic?
a) Volatile liquids
b) Gas
c) Slow acting
d) Inducing agents
- (xv) Select the correct option: Thiopental Sodium is freely soluble in _____.
a) alcohol
b) ether
c) chloroform
d) water
- (xvi) Identify the full form of GABA.
a) gamma-aminotartaric acid
b) gamma-aminobenzoic acid
c) gamma-alkylbenzoic acid
d) gamma-aminobutyric acid
- (xvii) Identify the correct option: Butabarbital belongs to which class of barbiturates?
a) Long acting
b) Short acting
c) Medium acting
d) Ultra-short acting
- (xviii) Identify the correct option: Thiopentone belongs to which class of barbiturates?
a) Long acting
b) Short acting
c) Medium acting
d) Ultra-short acting
- (xix) Predict the correct option: Synonym for Chlorinated lime is.
a) Talc powder
b) Borax powder
c) Lactose
d) Bleaching powder
- (xx) Identify the correct option: Argentometric titration is related to.
a) Precipitation titration
b) Gravimetric analysis
c) Redox titration
d) Neutralization titration

Group-B

(Short Answer Type Questions)

3 x 10=30

2. Discuss the principle for the limit test of Iron and explain the role of thioglycolic acid. (3)
 3. Explain accuracy and precision (3)
 4. Describe antacids and classify them with suitable examples in each class. (3)
 5. Briefly explain about hypertension and classify antihypertensive agents with suitable example. (3)
 6. Illustrate the structures of: Phenytoin Sodium, Propranolol, Captopril (3)
 7. Illustrate schematically the mode/mechanism of action of NSAIDs. (3)
 8. Describe about market preparations, formulation and uses of Chlorhexidine gluconate. (3)
 9. Describe about potassium permanganate (3)
 10. Describe one drug each from Short acting and Long acting nitrates (3)
 11. Classify anti anginal agents with suitable examples (3)
- OR**
- Classify NSAID with suitable examples. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

12. State briefly about Tolazoline (5)
13. Describe Carvedilol (5)
14. Discuss in details about Aspirin and Ibuprofen (5)
15. Explain about stability, storage condition, market formulation storage condition and uses of Lamotrigine. (5)
16. Explain Neostigmine with structure (5)
17. Explain about Fluoxetine with its chemical structure. (5)

OR

Explain Nor-Epinephrine with structure (5)