

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF PHARMACY
B. Pharm. Winter 2022 - 23 Examination

Semester: 5

Date: 11/10/2022

Subject Code: BP501T

Time: 10:00 am to 01:00 pm

Subject Name: Medicinal Chemistry – II

Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions (MCQs) (1 Mark Each)

(20)

1. Which heterocyclic ring is present in Triprolidine Hydrochloride?
a) furan, 1,3-thiazole
b) pyridine, furan
c) pyridine, pyrrolidine
d) pyrrolidine, thiazole
2. L-Thyroxine contain _____ phenyl ring.
a) 3
b) 2
c) 1
d) 0
3. Mechlorethamine is use for the treatment of
a) Angina pectoris
b) H1-antagonists
c) Hodgkin's lymphoma
d) Erectile dysfunction
4. Voglibose is use for the treatment of.....
a) Diabetes mellitus
b) Congestive Heart Failure
c) Thyroid
d) Cancer
5. Methyldopate hydrochloride is
a) Oral contraceptives
b) Anti-hypertensive Agents
c) Anti-hyperlipidemic agents
d) Antidiabetic agents
6. Dibucaine contain which heterocyclic ring?
a) Quinoline
b) Isoquinoline
c) Thiazolidinediones
d) Oxazolidinone
7. Glimepiride is...
a) Biguanides
b) Meglitinides
c) Thiazolidinediones
d) Sulfonylureas
8. Clofibrate act by...
a) Increase in secretion of lipids into the bile and ultimately the intestine
b) Stop the synthesis of vitamin K-dependent factors
c) Inhibits active chloride reabsorption at the early distal tubule via the Na-Cl cotransporter
d) By stopping the sodium ions from passing through the voltage-gated channels
9. Following are the example of Loop diuretics **EXCEPT..**
a) Furosemide
b) Bumetanide
c) Nifedipine
d) Ethacrynic acid
10. Following are the example of proton pump inhibitors **EXCEPT..**
a) Rabeprazole
b) Omeprazole
c) Cimetidine
d) Lansoprazole
11. Nitroglycerin is also known as _____
a) glyceryl tetranitrate
b) glyceryl drinitrate
c) glyceryl trinitrate
d) glyceryl mononitrate
12. Following all are the antibiotics excepts _____
a) Dactinomycin
b) Cetirizine
c) Bleomycin
d) Daunorubicin
13. Which heterocyclic ring is present in Acetazolamide?
a) thiadiazole
b) oxazole
c) pyridine
d) thiazole

14. Clofibrate is _____
 a) Local Anesthetics
 b) Oral contraceptives
 c) Anti-hyperlipidemic agents
 d) none of above
15. Tolbutamide is _____
 a) Sulfonylureas
 b) Thiazolidinediones
 c) Biguanides
 d) Meglitinides
16. Which one is starting material for synthesis of Benzocaine?
 a) p-amino benzoic acid
 b) Pyrane
 c) Cyclohexane carboxylic acid
 d) Oxazole
17. Following all drugs are the example of aromatic **EXCEPT..**
 a) Diphenhydramine
 b) Cetirizine
 c) Metformin
 d) Furosemide
18. Mannitol is which type of diuretics?
 a) Osmotic Diuretics
 b) Carbonic anhydrase inhibitors
 c) Loop diuretics
 d) Potassium sparing Diuretics
19. Mechanism of action of Warfarin is ____ -
 a) Gastric Proton pump inhibitors
 b) inhibits the vitamin K epoxide reductase complex 1
 c) Loop diuretics
 d) H1-antagonists
20. IUPAC name of Nifedipine is _____
 a) dimethyl 2,6-dimethyl-2-(2-nitrophenyl)-2,4-dihydropyridine
 b) dimethyl 2,3-dimethyl-4-(2-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylate
 c) dimethyl 2,6-dimethyl-4-(2-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylate
 d) 2-(2-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylate

Q.2 Long Answers (any 2 out of 3) (10 Mark Each) (20)

1. Classify H1-antagonists. Write SAR of H1-antagonists.
2. Give the details classification of Diuretics. Write synthesis of Furosemide.
3. Write a brief note about the Antidiabetic agents. Write synthesis of Tolbutamide.

Q.3 Short Answers (any 7 out of 9) (5 Mark Each) (35)

1. Write SAR of Local anesthetics.
2. Give a brief note on Thyroid and antithyroid drugs.
3. Explain in brief about the Anti-arrhythmic Drugs.
4. Classify Anti-neoplastic agents.
5. Write down the synthesis of Nitroglycerin and Isosorbide dinitrite.
6. Write down the synthesis of Methyldopate hydrochloride and Warfarin.
7. Write a short note on Drugs acting on Endocrine system.
8. Explain the mechanism of action of the Calcium channel blockers.
9. Write mechanism of action of the Gastric Proton pump inhibitors.