



184

Total No. of Questions : 14]

BP 402 T

[Total No. of Pages : 01

**II/IV B. PHARMACY (Regular) DEGREE EXAMINATIONS,
NOVEMBER-2022
Fourth Semester
MEDICINAL CHEMISTRY - I - THEORY**

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. Give an account on Bioisosterism, Optical and Geometrical isomerism in relation to biological action.
2. Write the classification of sympathomimetic agents. Discuss their SAR and synthesis of Salbutamol.
3. Write a note on
 - a) Cholinesterase reactivators.
 - b) Solanaceous alkaloids used as cholinolytics.
4. Give the chemical classification of Antipsychotics and discuss the SAR of Phenothiazines and synthesis of Chlorpromazine hydrochloride.
5. Define and classify General anesthetics. Write a note on ultra short acting barbiturates used as general anesthetics and outline the synthesis of Methohexital Sodium.
6. Write the synthesis, MOA and therapeutic benefits of
 - a) Ibuprofen.
 - b) Methadone hydrochloride.
7. Discuss the principles of Phase - I Drug Metabolism with examples.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Write the synthesis, medicinal uses and mechanism of action of Tolazoline.
9. Write the biosynthesis and catabolism of acetylcholine and outline synthesis of Carbochol.
10. Discuss the synthesis and medicinal uses of Procyclidine hydrochloride.
11. Describe the SAR of Benzodiazepines.
12. Give an account on Succinimides and outline the synthesis and uses of Ethosuximide.
13. Write a note on SAR of Morphine analogues.
14. Give a brief account on selective COX-II inhibitors.



Total No. of Questions : 14]

BP 402 T

[Total No. of Pages : 02

II/IV B. PHARMACY (SUPPLY) DEGREE EXAMINATIONS,
FEBRUARY- 2022
Fourth Semester

MEDICINAL CHEMISTRY I - THEORY

Time : Three Hours

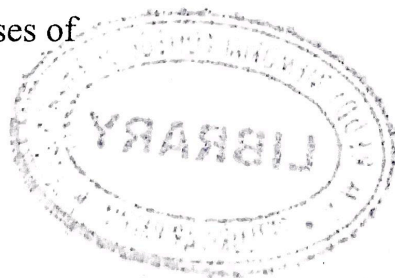
Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. Give a detailed note on phase II metabolism and its significance in ADME of a drug molecule.
2. What are Parasympatholytics ? Classify them with examples from each class and give the synthesis of Carbachol.
3. What are general anaesthetics ? Classify them with examples and outline the synthesis of Halothane.
4. What do you know of
 - a) Cholinesterase reactivator.
 - b) Fluro buterophenones.
5. Write Structure, MOA and uses of
 - a) Diazepam.
 - b) Phenobarbital.
 - c) Clonazepam.
 - d) Valproic acid.
6. Give the classification and MOA of NSAIDs. Outline the synthesis of Ibuprofen.
7. Outline the Synthesis, MOA and Uses of
 - a) Tolazoline.
 - b) Propranolol.



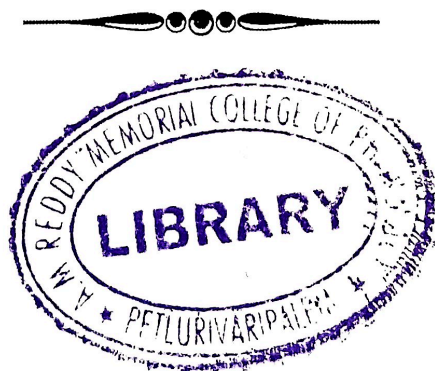
[P.T.O.]

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. What do you know of CYP450 ? Explain its role in oxidative metabolism with examples.
9. Explain how ionization influences biological activity.
10. Outline the biosynthesis of adrenaline. Write its significance.
11. Explain the role of α -adrenergic blockers in the treatment of hypertension, with suitable examples.
12. Explain the SAR of Phenothiazines.
13. Outline the synthesis, MOA and uses of Phenytoin.
14. Add a detailed note on narcotic antagonists.



Total No. of Questions :14]

[Total No. of Pages : 02

II/IV B.PHARMACY (Regular) DEGREE EXAMINATIONS, AUG/SEP-2019

Fourth Semester

B.Pharmacy

MEDICINAL CHEMISTRY-I-Theory

Time: Three Hours

Maximum marks:75

SECTION-A

Answer any FIVE Questions.

5X10=50M

1. Discuss the concepts of Partition coefficient and Bioisosterism in relation to biological action.
2. Classify Sympathomimetic drugs with examples. Give the synthesis of phenylephrine.
3. Explain the SAR of β -Blockers. Write the synthesis and medicinal uses of propranolol.
4. Give an account on cholinesterase inhibitors with their mechanism. Outline the synthesis and uses of Neostigmine.
5. Explain the SAR and mechanism of action of Barbiturates in relation to sedative action.
6. Define and classify anticonvulsant drugs with their structures. Write the mode of action and synthesis of Phenytoin.
7. Discuss the SAR of morphine analogues and outline the synthesis and uses of Methadone hydrochloride.

SECTION-B

Answer any FIVE Questions.

5X5=25M

8. Mention the factors affecting drug metabolism.
9. Outline the biosynthetic pathway of Catecholamines.

P.T.O

Total No. of Questions :14]

BP 402 T

[Total No. of Pages : 02

II/IV B.PHARMACY (Supply) DEGREE EXAMINATIONS, JANUARY-2020

Fourth Semester

B.PHARMACY

MEDICINAL CHEMISTRY-I-Theory

Time: Three Hours

Maximum marks:75

SECTION-A

Answer any FIVE Questions

5X10=50M

1. Discuss principle of phase-II Drug metabolism and list out the factors affecting drug metabolism.
2. Describe the biosynthesis and catabolism of catecholamines.
3. Classify Parasympathomimetic agents with example and add a note on their SAR.
4. Classify sedative and hypnotic drugs with examples. Write the synthesis and uses of Diazepam.
5. Define and classify Antipsychotics. Explain SAR of phenothiazines and outline synthesis of chlorpromazine hydrochloride.
6. Classify NSAIDs with examples. Write the SAR of Propionic acid derivatives and outline the synthesis of Ibuprofen.
7. Explain the synthesis and medicinal uses of
 - a) Halothane
 - b) Ketamine hydrochloride

SECTION-B

Answer any FIVE Questions

5X5=25M

8. Write the role of solubility and chelation in relation to biological activity.
9. Explain the synthesis, Mechanism of action and uses of salbutamol.
10. Classify Adrenergic antagonists with examples.
11. Outline the SAR of cholinolytic agents.

12. Write the synthesis and uses of Carbamazepine.
13. Enumerate the synthesis and therapeutic uses of Fentanyl citrate.
14. Write the structures and uses of
 - a) Nalorphine hydrochloride
 - b) Antipyrine
 - c) Piroxicam

