Fourth Semester B.Pharm Degree Regular/Supplementary Examinations March 2023 Medicinal Chemistry - 1

(2017 Scheme)

Time: 3 Hours

- Answer all questions to the point neatly and legibly
 Do not leave any blank pages between answers
 Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw diagrams wherever necessary Essays
 - 1. Explain drug metabolism with examples. Outline the phase one metabolism with suitable examples.
 - 2. Classify parasympathomimetic agents with examples. Give the chemical structures of any two agents from each class. Write the synthesis and mechanism of action of dicyclomine hydrochloride.

Short Notes

- 3. Explain the biological significance of ionization and optical isomerism of drugs.
- 4. Explain the Structural Activity Relationship (SAR) of sympathomimetic drugs.
- 5. Give the synthesis, mechanism of action and uses of propranolol.
- 6. Classify antipsychotics with structural examples.
- 7. Outline the chemical synthesis and mechanism of action of ketamine hydrochloride.
- 8. Classify anti-inflammatory drugs with structural examples.
- 9. Give the structures and uses of
 - Phenylephrine
 Carbachol
 Diazepam
 Carbamazepine
 Paracetamol

Answer Briefly

(10x2=20)

- 10. Explain any two factors affecting the drug metabolism.
- 11. What are adrenergic antagonists.
- 12. List any two important structural requirements for cholinergic blocking drugs.
- 13. Outline the mechanism of action of cholinesterase inhibitors.
- 14. Enlist the barbiturate class of sedatives and hypnotics along with their structures.
- 15. Write the chemical structure and uses of ethosuximide.
- 16.List important structural requirements for phenothiazine class of antipsychotic drugs.
- 17. Write the chemical structure and uses of methohexital sodium.
- 18. Give a note on morphine analogues.
- 19. Outline the chemical synthesis of mefenamic acid.

Max. Marks: 75

(2x10=20)

(7x5=35)

CORRECTION / NO-CORRECTION FILE

QPCODE: 422006

Dated: 29-03-2023

Question No. 9

Modified as "Give the structures and uses of

. Phenylephrine . Carbachol . Diazepam . Carbamazepine . Acetaminophen."

Corrections/Modifications/Replacement of Questions if any shall be made available to all students. Take the print out of the Correction File in such cases and distribute to all students.

(Sd/-)

CONTROLLER OF EXAMINATIONS