QP Code: 422006 **Reg. No…….**

Fourth Semester B.Pharm Degree Supplementary Examinations
July 2023
Medicinal Chemistry - 1

(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***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 **(2x10=20)**

1. Write with examples, the importance of ● Partition coefficient ● Hydrogen bonding ● Bioisosterism in relation to biological actions (3+3+4)
2. Define and classify sympathomimetic agents with structural examples. Outline the chemical synthesis and mechanism of action of salbutamol and tolazoline.

Short Notes **(7x5=35)**

3. Explain the Structural Activity Relationship (SAR) of parasympathomimetic drugs.
4. Give the synthesis, mechanism of action and uses of procyclidine hydrochloride.
5. Classify sedatives and hypnotics with structural examples.
6. Classify antipsychotic drugs with structural examples.
7. Outline the chemical synthesis and mechanism of action of mefenamic acid.
8. Give a note on narcotic analgesics.
9. Give the structures and uses of
   ● Propranolol ● Haloperidol ● Ethosuximide ● Halothane ● Aspirin

Answer Briefly **(10x2=20)**

10. With examples, explain any one phase II metabolic reactions.
11. List any two important structural requirements for sympathomimetic drugs.
12. What are cholinesterase reactivators.
13. Give a brief note on cholinesterase inhibitors.
14. List two important Structural Activity Relationship (SAR) of barbiturates.
15. Classify anticonvulsants.
16. Outline the chemical synthesis of chlorpromazine.
17. Explain the mechanism of action of inhalational anaesthetics.
18. Enlist the narcotic antagonists along with their structures.
19. Outline the chemical synthesis of ibuprofen.

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