Code No: F-7176/PCI

FACULTY OF PHARMACY

B. Pharmacy IV - Semester (PCI) (Backlog) Examination, March 2024

Subject: Medicinal Chemistry – I

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

PART-A

Note: Answer all the questions. **(10 x 2 = 20 marks)**

1. What is Chelation? Write its significance.
2. Ortho salicylic acid is more active than para hydroxy benzoic acid. Why?
3. Classify cholinergic receptors and write their distribution.
4. Give the uses of Isoproterenol & Phentolamine.
5. Give the uses of phenytoin and clonazepam.
6. Outline the biosynthesis of Acetyl choline
7. Define Sedatives? Give two examples
8. Write the structures of any two barbiturate drugs & their uses.
9. Give the synthesis of Ibuprofen.
10. Define narcotic antagonists? Give two examples

PART-B

Note: Answer any two questions. **(2 x 10 = 20 Marks)**

11. Explain how the following physicochemical properties influence the biological action of a drug molecule
    (i) Bio isosterism (ii) Chelation (iii) Protein binding (iv) Partition coefficient

12. Define, classify cholinergic agonists with examples and discuss the mode of action of acetyl cholinesterase inhibitors.

13. Define NSAIDs with minimum two structural examples in each class and write MOA, uses & SAR of morphine analogues.

PART-C

Note: Answer any seven questions. **(7 x 5 = 35 Marks)**

14. Discuss Phase-I reactions.
15. Explain the role of cytochrome 450 enzyme in drug Metabolism
16. Write a note on alpha adrenergic blockers
17. Write a note on Neuromuscular blocking agents
18. Write the classification & SAR of parasympathomimetics agents.
19. Give the structures, MOA and uses of Methantheline, Clonidine.
20. Write the structures and uses of a) Diazepam b) Triclofos Sodium.
21. Classify antipsychotics with examples.
22. Write the synthesis and uses of Halothane & Ketamine.

******