



Paper id: 252682

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Subject Code: BP402T

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BPHARM
(SEM IV) THEORY EXAMINATION 2024-25
MEDICINAL CHEMISTRY I – THEORY

TIME: 3 HRS**M.MARKS: 75**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A**1. Attempt all questions in brief.****10 x 2 = 20**

a.	Define bioisosterism and give one example.
b.	What are Phase I reactions in drug metabolism?
c.	Write the structure and use of phenylephrine.
d.	Give SAR of beta-blockers in brief.
e.	Differentiate between reversible and irreversible cholinesterase inhibitors.
f.	Write the synthesis and use of Neostigmine.
g.	What are barbiturates? Write any two examples.
h.	Write the mechanism of action of phenytoin.
i.	Mention the SAR of morphine analogues.
j.	Write the structure and therapeutic use of ibuprofen.

SECTION B**2. Attempt any two parts of the following:****2 x 10 = 20**

a.	Describe in detail the physicochemical properties in relation to biological activity.
b.	Classify adrenergic agonists in detail . Explain the SAR of sympathomimetic agents with examples.
c.	Discuss the synthesis, mechanism, and SAR of cholinergic blocking agents.

SECTION C**3. Attempt any five parts of the following:****7 x 5 = 35**

a.	Discuss the factors affecting drug metabolism including stereochemical aspects.
b.	Explain the biosynthesis and catabolism of catecholamines.
c.	Describe the SAR of benzodiazepines and write the structure of diazepam.
d.	Classify antipsychotic drugs. Explain SAR of phenothiazines.
e.	Write a short note on mechanism of action and synthesis of carbamazepine.
f.	Describe the classification and uses of general anesthetics.
g.	Discuss the structure, uses, and SAR of NSAIDs with special reference to ibuprofen and mefenamic acid.