

Roll No:

BPHARM

(SEM IV) THEORY EXAMINATION 2021-22 MEDICINAL CHEMISTRY I – THEORY

Time: 3 Hours

Total Marks: 75

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

SECTION A

1. Attempt *all* questions in brief.

a.	Define metabolism.
b.	Point out the role of partition coefficient in relation to biological action of drug?
c.	Describe the synthesis of Tolazoline.
d.	Give structure and uses of Phenylephrine.
e.	Discuss cholinergic receptors and their distribution.
f.	Differentiate anticholinergics and anticholinesterases.
g.	Compare the basic ring structures and mention uses of barbiturate and benzodiazepine.
h.	Give the MOA and structure of chlorpromazine.
i.	Discuss the synthesis of drug that causes dissociative anaesthesia.
j.	Name and give structures of any two narcotic antagonists.

SECTION B

2. Attempt any *two* parts of the following:

a.	Summarize about various physicochemical parameters that affect drug action.
b.	Classify sedative and hypnotics. Outline the synthesis, mechanism of action and uses of
	diazepam.
c.	Classify NSAIDs. Give the synthesis of Ibuprofen.

SECTION C

3. Attempt any *five* parts of the following:

a.	Compare phase I and phase II metabolism. Discuss various factors affecting drug
	metabolism.
b.	Outline the classification and SAR of sympathomimetics.
c.	Illustrate the MOA, synthesis and uses of (i) Dicyclomine hydrochloride (ii) Carbachol.
d.	Classify anticonvulsants and give synthesis of phenytoin.
e.	Classify general anaesthetics. Give synthesis of halothane.
f.	Explain the biosynthesis and catabolism of catecholamines.
g.	Give synthesis of propranolol and discuss SAR of beta blockers.

1 | P a g e QP22EP2_068 | 01-08-2022 13:32:04 | 115.240.67.178

 $7 \ge 5 = 35$

x 10 = 20

 $10 \ge 2 = 20$