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B. PHARM
(SEM V) THEORY EXAMINATION 2021-22
MEDICINAL CHEMISTRY-I

*Time: 3 Hours**Total Marks: 70***Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. **Attempt all questions in brief.** **2 x 7 = 14**

a.	Write the uses and mechanism of action of chlorpromazine.
b.	Discuss the drugs used for the treatment of Alzheimer disease.
c.	Draw the structure of ephedrine and write its uses.
d.	Give the synthesis of benzocaine.
e.	Write the uses and mechanism of action of Dicyclomine.
f.	Differentiate between geometrical and conformational isomers.
g.	Give the structure and uses of atropine.

SECTION B

2. **Attempt any three of the following:** **7 x 3 = 21**

a.	Classify CNS stimulants. Discuss about synthesis of caffeine.
b.	Define bioisosterism. Explain in detail about its applications.
c.	What are acetylcholinesterase inhibitors? Give the synthesis of tacrine.
d.	Describe skeletal muscle relaxants. Give examples along with the mechanism of action.
e.	Classify antipsychotic drugs. Discuss in detail about first generation antipsychotics.

SECTION C

3. **Attempt any one part of the following:** **7 x 1 = 7**

(a)	Classify local anesthetics. Discuss SAR of local anesthetics with suitable examples.
(b)	Describe sedative and hypnotics. Discuss in detail about SAR of barbiturates.

4. **Attempt any one part of the following:** **7 x 1 = 7**

(a)	Write down mechanism of action, synthesis of phenytoin and diazepam.
(b)	Give the classification and mechanism of action of drugs used for Parkinson disease.

5. **Attempt any one part of the following:** **7 x 1 = 7**

(a)	Describe antidepressant drugs. Classify them and explain in detail about tricyclic antidepressants.
(b)	Explain in detail about different forces existing between drug receptor interactions.

6. **Attempt any one part of the following:** **7 x 1 = 7**

(a)	Discuss in detail about the cholinergic drugs along with their uses.
(b)	Define antitussives. Give structure, mechanism of action and uses of dextromethorphan.

7. **Attempt any one part of the following:** **7 x 1 = 7**

(a)	Define the term Prodrug. Explain in detail with suitable examples along with its applications.
(b)	Classify anticonvulsant agents. Give the structures, mechanism of action of valproic acid and ethosuximide.