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BPHARM
(SEM VI) THEORY EXAMINATION 2023-24
MEDICINAL CHEMISTRY III 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.	Write in brief about Beta lactamase inhibitors with examples.
b.	Define Polyenes antibiotics with examples.
c.	Define prodrug with examples
d.	Draw the structure of Mebendazole and Diethylcarbamazine citrate.
e.	Enlist Anthelmintics drugs.
f.	Outline the synthesis of Dapsone.
g.	Write in brief about aminoglycosides antibiotics with their clinical uses.
h.	Enlist Macrolide antibiotics with clinical uses.
i.	Explain solid phase synthesis in combinatorial chemistry.
j.	Write the structure and uses of Chloramphenicol.

SECTION B

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

a.	What are Tetracyclines? Classify it with suitable examples. Write the SAR and mechanism of action.
b.	Give the SAR of 4-amino quinolines with structural examples. Describe the synthesis of Chloroquine and Pamaquine.
c.	Classify Sulfonamides with structural examples. Give the SAR of Sulfonamides and synthesis of sulfacetamide.

SECTION C

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

a.	Classify antiprotozoal agents? Give synthesis, mechanism of action and clinical applications of Metronidazole.
b.	Define and classify antitubercular agents. Write the synthesis and SAR of Isoniazid.
c.	Classify synthetic antifungal agents with suitable examples. Synthesis and clinical uses of Miconazole.
d.	Discuss SAR for quinolones antibiotics used in urinary tract infection. Give synthesis of Ciprofloxacin.
e.	Draw the structure of Acyclovir and Zidovudine with their mechanism of action and clinical uses in detail.
f.	Classify β -Lactam antibiotics with structural examples. Discuss SAR in detail.
g.	Write down the physicochemical parameters of QSAR in detail.