

Roll No: |

**BPHARMA**  
**(SEM VI) THEORY EXAMINATION 2021-22**  
**MEDICINAL CHEMISTRY III - THEORY**

**Time: 3 Hours**

**Total Marks: 75**

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

**SECTION A**

**1. Attempt all questions in brief.**

**10 x 2 = 20**

a.	What is B-lactam antibiotics? Give some examples.
b.	Draw the chemical structures of minocycline and doxycycline.
c.	Write the mechanism of action of Chloramphenicol.
d.	Define prodrugs with examples.
e.	Enlist urinary tract anti-infective agents.
f.	Write the mode of action and uses of zidovudine.
g.	Write mode of action and synthesis of isoniazid.
h.	Define anthelmintic agents. Write the synthesis of Mebendazole.
i.	Define QSAR.
j.	Describe applications of combinatorial Chemistry.

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**SECTION B**

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

**2 x 10 = 20**

a.	Discuss in detail about cephalosporins with suitable examples.
b.	Explain SAR of tetracycline. Discuss its mechanism of action and uses.
c.	Describe structure activity relationship of 4-amino quinolone. Explain mechanism of action and synthesis of Chloroquine.

**SECTION C**

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

**7 x 5 = 35**

a.	Explain substituent hydrophobicity constant in relation to drug design.
b.	Explain in detail about aminoglycosides with examples.
c.	Discuss chemistry, classification and SAR of Sulfonamides with suitable examples.
d.	Classify synthetic antifungal agents. Describe mechanism of action, synthesis and uses of Miconazole.
e.	Define combinatorial chemistry and explain in detail about solid phase synthesis.
f.	Define and classify anti tubercular agents. Explain in detail with suitable example.
g.	Describe the synthesis and uses of Acyclovir, Ciprofloxacin and Dapsone.

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