Paper ID : 250543

Roll No: | | | | | | | | | | | | | |

BPHARM
(SEM VI) THEORY EXAMINATION 2024-25
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.	Describe the chemical structure and therapeutic applications of Tetracycline.
b.	Outline the synthesis of Isoniazid.
c.	Illustrate the chemical structure of Chloramphenicol and explain its clinical use.
d.	What are anthelmintic agents? Provide two examples.
e.	Define molecular docking and explain its significance in drug discovery.
f.	What is the difference between SAR and QSAR.
g.	Give the name and use of β-Lactamase inhibitor.
h.	Write about the structure and use of metronidazole.
i.	Define anti-tubercular agents? Name the causative organism for tuberculosis.
j.	List out important anti-viral agents. Draw the structure of acyclovir.

SECTION B

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

a.	Define prodrug? Discuss their applications in detail.
b.	Define and classify antimalarial agents with examples. Give the mechanism of action and outline the synthesis of chloroquine.
c.	What are antibiotics? Classify with examples. Discuss the SAR & MOA of tetracyclines.

SECTION C

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

a.	Define the Concept and applications of combinatorial Chemistry.
b.	Discuss in detail about SAR of β-Lactam antibiotics with suitable examples
c.	What are Sulphonamides? Explain their SAR.
d.	What are aminoglycosides? Write the mechanism and SAR of aminoglycoside antibiotics
e.	Give the synthesis of Chloramphenicol.
f.	Define and classify the Physicochemical parameters used in QSAR.
g.	Write a short note on antifungal antibiotics and synthesis of Miconazole.