Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY
Winter Examination-2022

Subject Name: Medicinal Chemistry III – Theory

Subject Code: BP601T **Branch: B.Pharm**

Semester: 6 **Date: 19/09/2022** **Time: 11:00 To 02:00** **Marks: 75**

Instructions:

(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1		**Attempt the following questions:**	**(20)**
	a)	Define docking	**2**
	b)	Enumerate factors governing Drug design.	**2**
	c)	What are macrolides?	**2**
	d)	Give the source and structure of Tetracycline and Oxytetracycline.	**2**
	e)	Write down the structure and uses of Norfloxacin and Ofloxacin.	**2**
	f)	Classify Antiprotozoal agents with example.	**2**
	g)	What are the Degradation products of Penicillin? Give structure.	**2**
	h)	Define B- Lactamase inhibitors with example.	**2**
	i)	Give Structure and MOA of Erythromycin.	**2**
	j)	Classify Cephalosporins.	**2**

Attempt the following questions:

Q-2		**Attempt any two of following :**	**(20)**
	A	Define and Classify Antifungals, Explain SAR of Sulfonamides and Sulfones?	**10**
	B	Give the definition and classification of Antimalarials, explain the SAR of Quionolines.	**10**
	C	Explain the classification, MOA and SAR of Quinolones in brief, give the synthesis of Nitrofurantoin.	**10**

Q-3		**Attempt any Seven of following :**	**(35)**
	A	Describe solid and solution phase synthesis in combinatorial chemistry.	**5**
	B	Explain the life Cycle of Malarial parasite.	**5**
	C	Write down MOA, chemistry and uses of Aminoglycosides in brief.	**5**
	D	Classify sulphonamides. Give MOA and SAR in brief.	**5**

E	Give the synthesis, MOA and uses of Ciprofloxacin.	**5**
F	Define and explain physicochemical parameters used in QSAR.	**5**
G	Give the synthesis and MOA of Chloramphenicol.	**5**
H	Write the synthesis and uses of Chloroquine and Dapsone	**5**
I	Describe application, advantages and disadvantages of Combinatorial Chemistry.	**5**