Enrollment No:	Exam Seat No:

C. U. SHAH UNIVERSITY

Winter Examination-2021

Subject Name: Medicinal Chemistry - I

Subject Code: 5SC03MDC1 Branch: M.Sc. (Chemistry)

Semester: 3 Date: 14/12/2021 Time: 02:30 To 05:30 Marks: 70

Instructions:

- (1) Use of Programmable calculator and 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.

SECTION - I

Q-1		Attempt the following questions	(07)
	a.	What is called Pharmacodynamics?	01
	b.	What do you mean by drug and medicine?	01
	c.	Define Pharmacophore	01
	d.	What is called mechanism of action?	01
	e.	Define: Medicinal chemistry	01
	f.	What is known as Digitalis?	01
	g.	Define the therapeutic window.	01
Q-2		Attempt all questions	(14)
	a.	Write a note on sources of drugs.	07
	b.	Discuss the researches on nanomaterials for development of new drug.	07
		OR	
Q-2		Attempt all questions	(14)
	a.	Explain the principles of drug action.	05
	b.	Discuss the factors affecting drug action.	05
	c.	Define and classify the alkaloids.	04
Q-3		Attempt all questions	(14)
-	a.	Discuss the classification of receptors in details.	08
	b.	Write a note on mechanism of drug action.	06
		OR	



Q-3		Attempt all questions	(14)
	a.	Explain the dose response curve.	05
	b.	Write a note on nanorobots and Nano-nephrology.	05
	c.	Explain the up and down regulations of receptors.	04
		SECTION – II	
Q-4		Attempt the following questions	
	a.	• Define: Pharmacokinetics.	
	b.	What do you mean by lead compound?	01
	c.	Give only three name of enteral routs of drug administration.	
	d.	What is known as cellular drinking?	01
e.		Define the structure Activity Relationship (SAR)	01
	f.	What do you mean by volume of distribution?	01
	g.	State Fick's law.	01
Q-5		Attempt all questions	(14)
	a.	Discuss the routes of drug administrations.	08
	b.	Give the classification of bioisosteres in detail.	06
		OR	
Q-5		Attempt all questions	(14)
	a.	Explain the factor affecting absorption of drug.	08
	b.	Discuss the Hansch and free Wilson analysis.	06
Q-6		Attempt all questions	(14)
	a.	Discuss the methods of lead discovery.	
	b.	What is called bioavailability? Discuss the types and factors affecting on bioavalibility.	06
		OR	
Q-6		Attempt all questions	(14)
	a.	Write a note on drug metabolism.	07
	h	Discuss the factors affecting drug distribution	07

