C. U. SHAH UNIVERSITY Summer Examination-2019

Subject Name: Medicinal Chemistry - I Subject Code: 5SC03MDC1 Semester: 3 Date: 13/03/2019

Branch: M.Sc. (Chemistry) 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 Pharmacokinetics?	01
	b.	What do you mean by drug and medicine?	01
	c.	Define alkaloids.	01
	d.	What do you mean by drug absorption?	01
	e.	Define: Medicinal chemistry	01
	f.	What is pinocytosis?	01
	g.	Define drug Response	01
Q-2		Attempt all questions	(14)
	a.	Explain the Cumulative, Additive, Synergistic and antagonistic Effects with	07
		response vs. time curve.	
	b.	Discuss the current researches on nanomaterials for development of new drug.	07
		OR	
Q-2		Attempt all questions	(14)
	a.	Explain the principles of drug action	07
	b.	Write a note on the protein, polymer and nanotechnology-based delivery system.	07
Q-3		Attempt all questions	(14)
	a.	Write a note on receptor antagonist	07
	b.	Explain the drug receptor interaction.	07
		OR	

Q-3		Attempt all questions	(14)
	a.	Explain the dose response curve.	05



b.	Write a brief note on synergism and antagonism.	05
c.	Explain the factors affecting drug action.	04

SECTION – II

Q-4		Attempt the following questions	(07)
	a.	Define: Agonist	01
	b.	Give only types of endocytosis.	01
	c.	Define the term: Bioisosteres	01
	d.	Define the term phagocytosis or "cellular eating	01
	e.	Define: Prodrug	01
	f.	What is called Lead compound?	01
	g.	Write name of source and activity of drug-Salicylate.	01
Q-5		Attempt all questions	(14)
	a.	Discuss the enteral routes of drug administrations.	07
	b.	Explain the mechanism of drug absorption.	07
		OR	
Q-5		Attempt all questions	(14)
	a.	Explain the factors affecting drug distribution.	07
	b.	Discuss the important physicochemical properties of molecules for QSAR study.	07
Q-6		Attempt all questions	(14)
	a.	Discuss the methods of lead discovery.	07
	b.	Define SAR and explain the SAR of barbiturates.	07
		OR	
Q-6		Attempt all questions	(14)
	a.	Write a note on receptor antagonist.	07
	b.	Explain the phase-I and Phase-II metabolism.	07

