Exam Seat No:_____

C.U.SHAH UNIVERSITY Summer Examination-2020

Subject Name : Medicinal Chemistry - I

Subject Code : 5SC0	3MDC1	Branch : M.Sc. (Chemistry)		
Semester : 3	Date : 27/02/2020	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.	Describe the definition of Medicinal chemistry.	01
	b.	Define: Efficacy	01
	c.	Define: Pharmacodynamics	01
	d.	What is antagonist?	01
	e.	Define: Drug Selectivity	01
	f.	Define: Proto Alkaloids	01
	g.	Describe the term antibodies.	01
Q-2		Attempt all questions	(14)
C C	a.	Explain the classification of drugs based on origin.	08
	b.	Write the difference between mode of action and mechanism of action.	06
		OR	
Q-2		Attempt all questions	(14)
	a.	Write a note on following terms.	08
		(1) Pharmacophore	
		(2) Therapeutic window	
		(3) Drug Metabolism	
	b.	Explain Cumulative, Additive, Synergistic and antagonistic Effects with response	se 06
		vs. time curve.	
Q-3		Attempt all questions	(14)
	a.	Write a note on the principles of drug action.	07
	b.	Explain any three types of mechanism of drug action.	07
		OR	
Q-3		Attempt all questions	(14)
	a.	Explain about receptor, inverse and partial agonist.	05
	b.	Write a short note on Ligand-gated ion channel receptor.	05
	c.	Explain the factors affecting drug action.	04
		Pa	ge 1 of 2



	SECTION –	Π
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Q-4		Attempt the following questions	(07)
	a.	What is called Downregulation?	01
	b.	Write the equation of Threapeutic Index.	01
	c.	Define the term: Pharmacophore	01
	d.	Write the full form of MIC.	01
	e.	Define: Soft drug	01
	f.	Define: Lead compound	01
	g.	Write the statement of Fick's Law for diffusion.	01
Q-5		Attempt all questions	(14)
	a.	Write a note on routes of drug administrations.	07
	b.	Write a note on Carrier- mediated transport.	07
		OR	
Q-5		Attempt all questions	(14)
	a.	Explain the Renal Elimination process.	07
	b.	Write a note on phagocytosis and pinocytocsis.	07
Q-6		Attempt all questions	(14)
-	a.	Discuss the methods of lead identification.	07
	b.	Explain a note on Hansch Analysis and Free Wilson Analysis.	07
		OR	
Q-6		Attempt all questions	(14)
-	a.	Explain Bioisosteres concept with classification.	07
	b.	Discuss any two important pharmacokinetic parameters.	07

