## **C.U.SHAH UNIVERSITY**

## **Summer Examination-2016**

**Subject Name: Medicinal Chemistry-II** 

Subject Code: 5SC04CHC1 Branch: M.Sc. (Chemistry)

Semester: 4 Date: 05/05/2016 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	<b>(07)</b>
	a.	Define antibiotics.	<b>(1)</b>
	b.	What is hydration derivative?	<b>(1)</b>
	c.	Draw the structure of Cephalexin.	<b>(1)</b>
	d.	Write the synthesis of Methicillin.	<b>(2)</b>
	e.	Write the synthesis of Oxacillin.	(2)
Q-2		Attempt all questions	(14)
	a.	Write a note on SAR of penicillin.	<b>(6)</b>
	b.	Write the synthesis of Barbital sodium and Phenytoin.	<b>(4)</b>
	c.	Write the synthesis of Novalgin and Triazolam.	<b>(4)</b>
		OR	
Q-2		Attempt all questions	(14)
	a.	Write the synthesis and SAR of chloramphenicol.	<b>(6)</b>
	b.	Write the synthesis of Progabide and Dibucaine.	<b>(4)</b>
	c.	Write the synthesis of Chlorozepam and Encainide.	<b>(4)</b>
Q-3		Attempt all questions	(14)
	a.	What is $\beta$ -lectam antibiotics? Write the complete synthesis and mode of action of penicillin.	(8)
	b.	Discuss the classification of barbiturates based on duration action.	<b>(6)</b>
		OR	
Q-3		Attempt all questions	
	a.	Discuss the classification of local and general anesthetics.	(8)



	b.	Write notes on	(6)
		1. Antiarrhythmic 2. Anticonvulsant	, ,
		SECTION – II	
Q-4		Attempt the following questions	<b>(07</b> )
	a.	Write the synthesis of thiopental.	(1)
	b.	Write the synthesis of butamben.	(1)
	c.	Write the synthesis of diethyl ether.	(1)
	d.	Draw the structure of Quinalbarbitone.	(1)
	e.	Draw the structure of Paraldehyde.	(1)
	f.	Draw the structure of Glutethimide.	(1)
	g.	Draw the structure of Methaqualone.	(1)
Q-5		Attempt all questions	(14)
	a.	Write a note on Neuroleptics.	<b>(6)</b>
	b.	Write the synthesis of Imipramine and Phenelzine.	<b>(4)</b>
	c.	Write the synthesis, properties and doses of Flecainide and Satolol.	<b>(4)</b>
		OR	
Q-5		Attempt all questions	
	a.	Write a note on antidepressant.	(6)
	b.	Write the synthesis of Carbamazepine and Lamotrigine.	<b>(4)</b>
	c.	Write the synthesis, properties and doses of Aminodorane and Mexiletine HCl.	<b>(4)</b>
Q-6		Attempt all questions	(14)
	a.	Discuss the malaria cycle of human and mosquito.	(8)
	b.	Write a note on	<b>(6)</b>
		1. Synthesis of Chloroquine and Isoniazide	
		2. Anti-tuberculosis agents	
		OR	
Q-6		Attempt all Questions	(0)
	a.	Discuss the classification of antimalarial agents.	(8)
	b.	Write a note on	<b>(6)</b>
		1. Synthesis of Mefloquine and Mexiletine	
		2. Types of malaria	

