Enrollment No:	Exam Seat No:
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## **C.U.SHAH UNIVERSITY**

## **Summer Examination-2016**

**Subject Name: Chemistry-VII** 

Subject Code: 4SC04CHC1 Branch: B.Sc.(Chemistry)

Semester: 4 Date: 10/05/2016 Time: 02:30 To 05:30 Marks: 70

## **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:	(14)
	a)	Give name of the reaction involving C-C bond formation with its mechanism.	(1)
	<b>b</b> )	What are the products obtained by chemical reaction between oleic acid and	(1)
	,	KMnO <sub>4</sub> in basic and neutral media?	( )
	c)	Draw reaction scheme of Stephen reaction.	<b>(1)</b>
	<b>d</b> )	What is special isoprene rule?	(1)
	<b>e</b> )	Give examples of any two polysaccharide sugar.	(1)
	<b>f</b> )	What is the constitution of maltose?	(1)
	<b>g</b> )	Which reagent is used for oxidation of allylic or benzylic C-H fragments to the corresponding allylic or benzylic alcohols?	(1)
	h)	Give examples of epimer of D-glucose.	<b>(1)</b>
	i)	What is the application of nitric acid in organic synthesis?	(1)
	<b>j</b> )	Give name of the reaction for synthesizing pyrrole	(1)
	<b>k</b> )	Give name of the cyclic structures of glucose and fructose.	(1)
	1)	Define isoelectric point of amino acids.	(1)
	m)	Draw structure of malachite green.	(1)
	n)	Draw structure of congored.	(1)
Attemp		Cour questions from Q-2 to Q-8	(-)
Q-2		Attempt all questions	(14)
	a)	Explain MPV reduction and Skraup synthesis.	<b>(7)</b>
	<b>b</b> )	Explain the reactions in which organic group is migrated from N atom to e-	(7)
	,	efficient C atom.	( )
Q-3		Attempt all questions	(14)
	a)	What are the applications of LAH and silanes in organic synthesis?	<b>(7</b> )
	<b>b</b> )	What are different types of carotenoids? Write a note on general properties of carotenoids.	(7)

Q-4		Attempt all questions	(14)
	a)	What are terpenoids? Give classification of terpenoids with suitable examples of monoterpenoids.	<b>(7</b> )
	<b>b</b> )	Explain the chemical reactions for determining constitution of menthol. Write the synthesis of menthol given by Kotz and Hese.	(7)
Q-5		Attempt all questions	(14)
	a)	What are the different chemical properties of glucose? Write the chemical reactions of glucose with suitable examples.	(7)
	<b>b</b> )	Define carbohydrates. Give classification of carbohydrates with suitable examples.	(7)
Q-6		Attempt all questions	(14)
	a)	Discuss classifications of amino acids with suitable examples	<b>(7</b> )
	<b>b</b> )	Explain method for synthesis and degradation of aldose.	<b>(7</b> )
Q-7		Attempt all questions	(14)
	a)	Give definition of drugs. Explain classification of drugs.	<b>(7</b> )
	<b>b</b> )	Draw and explain reaction scheme for synthesis of paludrine and chloramphenicol.	(7)
Q-8		Attempt all questions	(14)
	a)	What are dyes? Explain different types of dyes.	<b>(7)</b>
	<b>b</b> )	Draw and explain reaction scheme for synthesis of methyl orange and crystal violet.	<b>(7</b> )

