

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Organic Chemistry-I

Subject Code: 4SC05CHC2

Branch: B.Sc.(Chemistry)

Semester: 5

Date: 25/04/2016

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) Define carbocation	1
	b) Give the structural formula of 2,5 di methyl hexane	1
	c) Define optical activity	1
	d) Define covalent bond	1
	e) Give the structural formula of 2,3 di methyl pentane	1
	f) Define carbanions	1
	g) What is Specific rotation ?	1
	h) Define chirality	1
	i) Define free radicals	1
	j) Give the structural formula of isopropyl alcohol	1
	k) What is hybridization?	1
	l) What is Isomer number?	1
	m) Define isomer	1
	n) Give the structural formula of neo pentene	1

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(14)
	A What is stereoisomerism? Discuss the isomer number.	05
	B Discuss the optical activity of plane-polarized light	05
	C What is configuration? Write a note on sequence rule.	04
Q-3	Attempt all questions	(14)
	A Write a note on diastereomers	05
	B Write a note on conformational isomers	05
	C Discuss the reaction of chiral molecules	04
Q-4	Attempt all questions	(14)
	A Write a note on relative stabilities of carbocations	05



	B	What is polar group? Discuss the charge-Polar group	05
	C	Write a short note on Conformations of ethane	04
Q-5		Attempt all questions	(14)
	A	Discuss the base-promoted halogenation of ketones	06
	B	Write a short note on Structure of ethane	04
	C	Write a short note on Grignard reagent	04
Q-6		Attempt all questions	(14)
	A	Write a note on Relative stabilities of carbocations	06
	B	Write a short note on witting reaction with mechanism	04
	C	Discuss the Halogenation and its Mechanism	04
Q-7		Attempt all questions	(14)
	A	Discuss the classes and physical properties of C-atoms and H-atoms	07
	B	Discuss the industrial sources of C-atoms and H-atoms	07
Q-8		Attempt all questions	(14)
	A	Discuss the free rotation of the carbon-carbon single bond	07
	B	Discuss Vander Waals repulsion	07

