## C.U.SHAH UNIVERSITY Summer Examination-2017

## Subject Name: Chemistry-IV

Subject Code: 4SC03CHC2			Branch: B.Sc. (Chemistry)	
Semester	: 3	Date: 27/03/2017	Time: 10.30 To 01.30	Marks: 70
(2) Ir (3) D	Use of nstruc Draw 1	Programmable calculator & any o etions written on main answer book neat diagrams and figures (if neces ne suitable data if needed.	are strictly to be obeyed.	hibited.
Q-1	<b>l</b> )	Attempt the following questions Define enthalpy What is isobar? Draw the structure of $B_2H_6$ Define lanthanides Define entropy What is the shape of d orbital? Define isotopes What is the shape of s orbital? Draw the structure of Benzamide Write the full form of IUPAC Draw the structure of XeF <sub>6</sub> . Define actinides Draw the structure of BF <sub>3</sub> . What is the shape of p orbital?	::	<pre>(14) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1</pre>
Attempt : Q-2	•	our questions from Q-2 to Q-8 Attempt all questions Discuss the position of noble gases in Write the chemical and photocher Write a note on chemistry of hydr	nical reactions of ozone	(14) (5) (5) (4)
Q-3	A. B.	Attempt all questions Write a note on 1. Metallic radius 2. Van-der-waal's radius Discuss the occurrence and extract	tion of lanthanides	(14) (7)
	р.	Discuss the occurrence and extrac		(7)

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Q-4		Attempt all questions	(14)
	А.	Explain chemical properties of lanthanide	(7)
	В.	Discuss chemical bonding in $B_2H_6$	(7)
Q-5		Attempt all questions	(14)
	А.	Write a note on characteristics of p & d-block elements	(7)
	В.	Discuss the effect of Lanthanide contraction.	(7)
Q-6		Attempt all questions	(14)
	А.	Write a note on general properties of actinides	(7)
	В.	Write the uses of lanthanides and actinides	(7)
Q-7		Attempt all questions	(14)
	А.	Discuss method for the separation of lanthanides	(5)
	В.	Discuss the properties of diborane and silicates	(5)
	C.	Explain the position of hydrogen in periodic table	(4)
Q-8		Attempt all questions	(14)
	А.	Discuss structure of diborane and borazole	(6)
	<b>B.</b>	Write a note on	(8)
	р.	1. Reactivity of polyhalides	(0)
		2. Pseudo halides	



