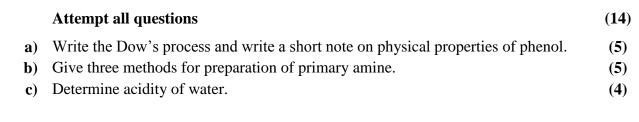
	Enrollme	ent No:		_ Exam Seat No:				
	C.U.SHAH UNIVERSITY							
	Summer Examination-2019							
	Subject 1	Name: Chemistry-I	I					
	Subject Code: 4SC02CHE1		Branch: B.Sc. (All)					
	Semester	r: 2 Date:	25/04/2019	Time: 02:30 To 05:30	Marks: 70			
	(2) I (3) I	Use of Programmabl nstructions written of	on main answer and figures (if n	ny other electronic instrument book are strictly to be obeyed ecessary) at right places.	-			
Q-1	_	Attempt the follow	ving questions:			(14)		
	a) Give one example of mono and dihydric alcohol.					(1)		
	<b>b</b> )	-	intramolecular H-bond? Give one example.					
	<b>c</b> )	-						
	<b>d</b> )	d) Give two example of electrode which is reversible with respect to the cation.						
	e)	What is catalyst?				(1)		
	<b>f</b> )	Define: Half cell				(1)		
	g)	Give only reaction	for preparation	of Diazobenzene from anilin	e.	(1)		
	h)	Define: Hard and s	oft water			(1)		
	i)	•	responsible for t	the alkalinity or basicity for v	west water?	(1)		
	<b>j</b> )	Define : Turbidity				(1)		
	<b>k</b> )	What is meant by o	=			(1)		
	1)	Which radical give		lor in flame test?		(1)		
	m)	What are promoter	s?			(1)		
	n)	What are amines?				(1)		
Atte	empt any f	four questions from	Q-2 to Q-8					
Q-2	}	Attempt all questi	ions			(14)		
	<b>a</b> )	Explain chemical p	properties of alco	ohols.		<b>(7</b> )		
	<b>b</b> )	Discuss chemical p	properties of ethe	ers.		<b>(7)</b>		





Q-3

Q-4	Attempt all questions		
	a)	Explain Born-Haber cycle in detail.	<b>(7</b> )
	<b>b</b> )	Write a note on non stoichiometric defects.	<b>(7</b> )
Q-5		Attempt all questions	
	a)	Discuss energy level diagram of H <sub>2</sub> and He <sub>2</sub> with bond order and its magnetic properties.	<b>(7</b> )
	<b>b</b> )	Explain the formation of $\sigma$ & $\sigma^*$ and $\pi$ & $\pi^*$ Orbitals in detail.	<b>(7</b> )
Q-6		Attempt all questions	
	<b>a</b> )	Write a note on Galvanic cell with figure.	<b>(7)</b>
	<b>b</b> )	Explain reversible and irreversible cell with proper figure.	<b>(7</b> )
Q-7		Attempt all questions	
	<b>a</b> )	Give the functions of catalyst.	<b>(5)</b>
	<b>b</b> )	Explain the working of catalyst with the adsorption theory.	(5)
	c)	Calculate ksp of Fe(OH) <sub>3</sub> whose solubility $1.0 \times 10^{-3}$ M.	<b>(4)</b>
Q-8		Attempt all questions	
	a)	Explain estimation of Ca <sup>+2</sup> and Mg <sup>+2</sup> with E.D.T.A. solution.	<b>(5)</b>
	<b>b</b> )	200 mL of $1.3 \times 10^{-3}$ M AgNO3 is mixed with 100 ml of $4.5 \times 10^{-5}$ M Na <sub>2</sub> S solution will precipitations occur? ( $K_{sp} = 1.6 \times 10^{-49}$ )	(5)
	c)	Write a note on borax bead test.	<b>(4)</b>

