Enrollment No: Exam S		No:	
	C.U.SHAH UNIVERSITY		
	Summer-2015		
Cour	ester: II Marks: 70	Date: 22/5/2015	
Instruc	rtions:		
2) 3) 4)	Attempt all Questions in same answer book/Supplementary. Use of Programmable calculator & any other electronic instrument programmable calculator answer book are strictly to be obeyed. Draw neat diagrams & figures (if necessary) at right places. Assume suitable & perfect data if needed.	ohibited.	
Q-1	Answer the following:		
	a) Define Accuracy & Precision.	2	
	b) Define Molarity & Normality.	2 2	
	c) Define Ligand & Chelate.		
	d) Mention some examples of mixed indicator in acid-base titration	. 1	
	e) What is the pH of 0.001 M NaOH solution? Derive it.	2	
	f) Define Primary & Secondary Standard.	2	
	g) What is solubility Product?	1	
	h) Mention von Weimar equation.	2	
	Attempt any four from Q-2 to Q-8.		
Q-2	Give answer of following.		
	a) Classify error. Describe the methods of error minimization.	5	
	b) Describe the theories of Acid-Base concept.	5	
	c) Describe Law of mass action and factors affecting the equilibrium	n. 4	
Q-3	Give answer of following.		
	a) What is buffer? Describe the Henderson-Hessselblach equation.	5	
	b) What is meant by pM indicators. Describe with example.	5	
	c) What is law of ionic product of water? Derive it. Describe the pH scale.	I 4	

Q-4 Give answer of following.

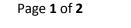
a) Describe the theory of acid-base Indicator and choice of indicators. 7 7

b) Describe the neutralisation curve for weak acid and strong base.

Q-5 Give answer of following.

a) Differentiate Iodimetry and Iodometry with example of reaction. 5 5

b) What is a precipitation titration? Mention the factors affecting solubility of precipitates.





	c) Differentiate levelling and differentiating solution.	4
Q-6	Give answer of following.	
	a) Describe Mohr's method.	5
	b) Describe Fajan's method.	5 5
	c) Classify the solvents used in non-aqueous titration with example.	4
Q-7	Give answer of following.	
	a) Differentiate masking and demasking agents.	5
	b) Write about different solvents and indicators used in non aqueous titration.	5 5
	c) Write the factors affecting surface adsorption.	4
Q-8	Give answer of following.	
	a) What is co-precipitation? Discuss the types of co-precipitation.	7
	Differentiate co-precipitation and post- precipitation.	
	b) Describe the steps involved in gravimetric analysis.	7