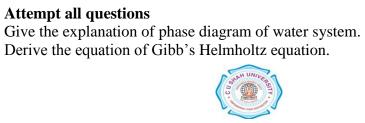
E	nrollme	ent No:							
	C.U.SHAH UNIVERSITY Winter Examination 2018								
	Winter Examination-2018								
S	ubject I	Name: Physical Cl	hemistry - III						
S	Subject Code: 4SC05PCH1			Branch: B.Sc. (Chemistry)					
S	emester	:: 5 Date:	03/12/2018	Time: 10:30 To 01:30	Marks: 70				
In	(2) I (3) I	Jse of Programmat nstructions written	on main answer and figures (if n	any other electronic instrument is probook are strictly to be obeyed. necessary) at right places.	hibited.	•			
Q-1		Attempt the follo	owing questions:	:	(1	14)			
Attom	a) b) c) d) e) f) g) h) i) j) k) l) m) n)	Give the definition Define the term of What is Phase diagrams.	nt of 2 nd law of the nof saturated solution of saturated solutions. It is a sequence of the saturated solution for determining the saturation of fugacity. It is a sequence of the saturation of saturation cell? It is a sequence of the saturation of saturation cell?	rmination of EMF.	in.	1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	pt any 1	-			<i>(</i> *	14)			
Q-2	a)b)c)	Attempt all ques Write any six cha Explain concentra Describe the oper	racteristics of lycation cell with tra			14) 6 4 4			
Q-3	a) b)		by dissociation co of partially misc	onstant of weak acid. cible liquid by phenol-water system		14) 7 7			



Q-4

a)b)

(14)

7

Q-5		Attempt all questions	(14)	
	a)	Explain liquid junction potential.	6	
	b)	Write any two optical properties of sols.	4	
	c)	Write a short note on Roult's law.	4	
Q-6		Attempt all questions	(14)	
	a)	Give brief explanation on fractional distillation.	7	
	b)	Write a note on derivation of phase rule.	7	
Q-7		Attempt all questions	(14)	
	a)	Explain free energy and work function in thermodynamics.	6	
	b)	Explain Brownian method of colloid.	4	
	c)	Describe EMF by P ^H measurements.	4	
Q-8		Attempt all questions	(14)	
-	a)	Write a note on steam distillation.	7	
	b)	Explain vapour pressure curve for liquid-liquid solutions.	7	

