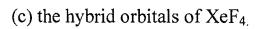
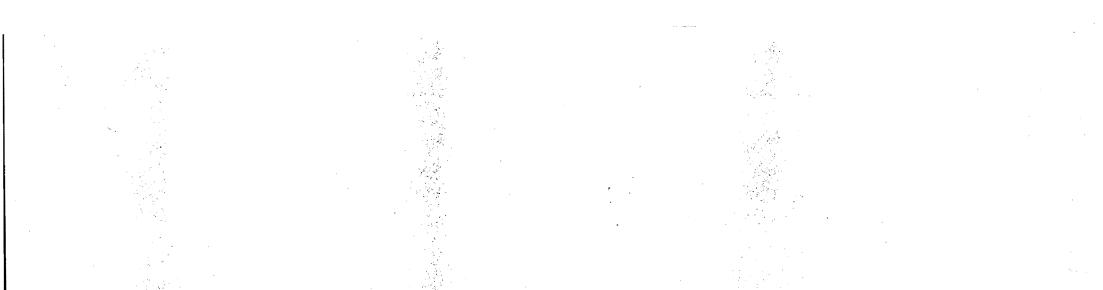
糸別・チ	、端材科科学学	學程二年級	料目・背	当 理化学		4
考試日期:	12月3日(星期;	六) 第1節	;	本試題共	3 大題,	2
第一部分:	選擇題(單選,	每題5分,共2	10分)			
1. Which of	the following ato	ms has the larges	t first ionization o	energy?		
(A) F	(B) Ne (C) 1	Na (D) He				
2. Which of	the following mc	blecules has the sh	nortest carbon-ca	rbon bond le	engths?	
$(A) C_3 I$	H_6 (B) C_2H_6	(C) C ₂ H ₄	$(D)C_2H_2$			
3. How man	y different struct	ural isomers are p	present for C ₆ H ₁₄ ?	?		
(A) 3	(B) 4 (C) :	5 (D) 6				
4. Which of	the following mo	plecules is the stro	ongest acid amon	g them?		
(A) HF	-		U .	0		
()		(_ ,				
第二部分:	解釋名詞(每是	夏5分,共30分	·)			
1. Pauli ex	clusion principle					
2. Isotope						
3. Hess's la	aw					
4. Half-life	;					
5. Sublima	tion					
6. Penetrat	ion effect					
第三部公:	問答題與計算是	頃(共 50 分)				
ヤーリル・						



背面尚有試題



系別:尖端材料科學學程二年級	科目:普通化學	4-2
考試日期:12月3日(星期六) 第1節	本試題共 3	
2. A certain oxygen atom has the electron config	guration $1s^2 2s^2 2p_x^2 p_y^2$. ((10%: 4%, 3%, 3%)
(a) How many unpaired electrons are present	? (b) Is this an excited state	of oxygen?
(c) In going from this state to the ground state	e would energy be released or abs	sorbed?
to produce an anhydrous residue (MC_2O_4 , N	A = Ca or Ba) that weighed 0.57	13 g. Subsequently,
to produce an anhydrous residue (MC_2O_4, M_2O_4) the anhydrous residue was heated in the corresponding to the two carbonates weighte (a) Write down the equations of the chemica	580° C to 620° C range and the ed 0.4673 g finally.	resulting products to 620° C range.
the anhydrous residue was heated in the corresponding to the two carbonates weighte	580°C to 620°C range and the ed 0.4673 g finally. al reactions occurred in the 580°C	to 620°C range. (10 pts)
the anhydrous residue was heated in the corresponding to the two carbonates weighte (a) Write down the equations of the chemica	580°C to 620°C range and the ed 0.4673 g finally. al reactions occurred in the 580°C	resulting products to 620° C range.

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