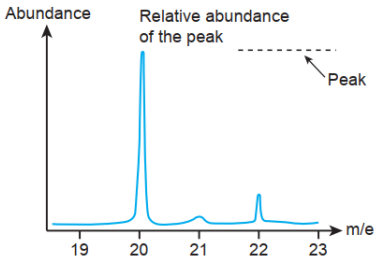
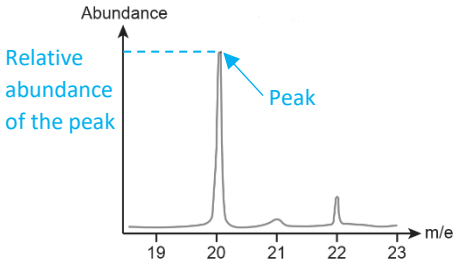
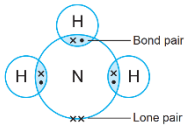
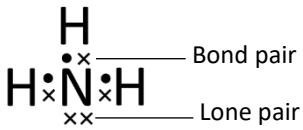
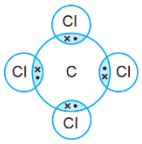
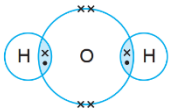
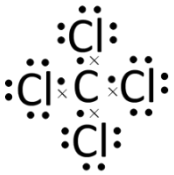
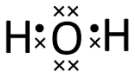
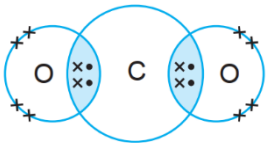
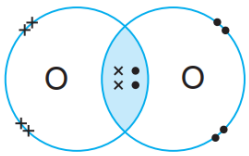
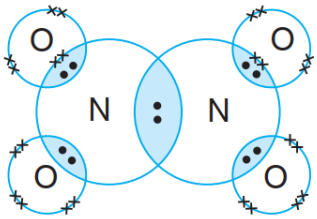
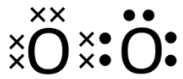
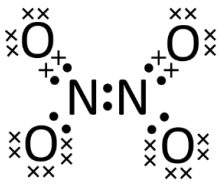
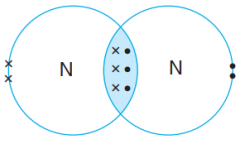
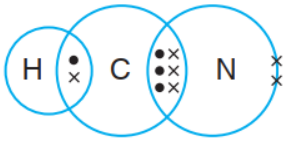
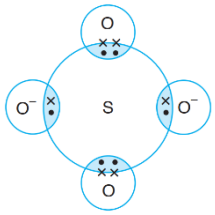
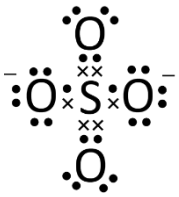
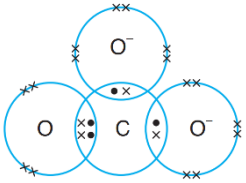
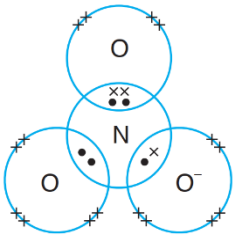
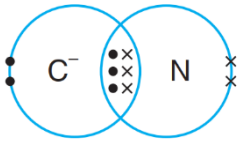
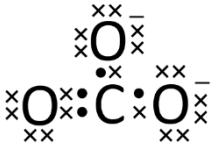
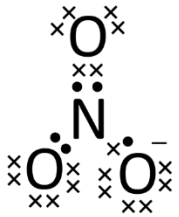
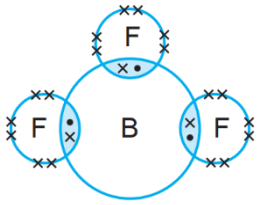
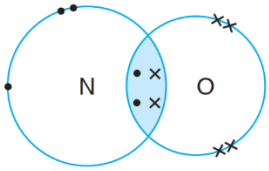
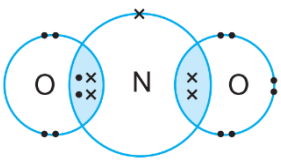
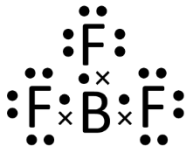
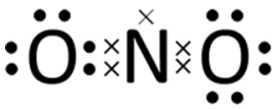
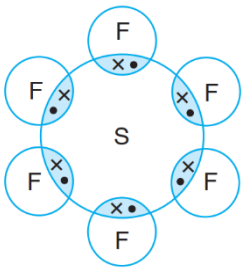
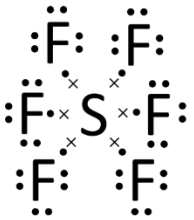
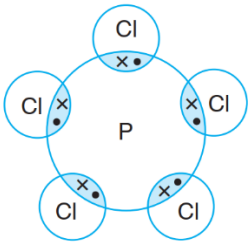
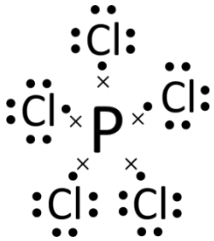
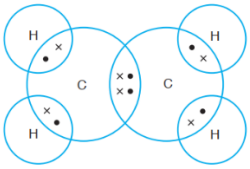
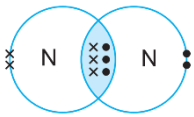
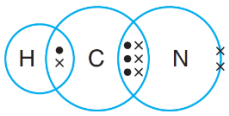
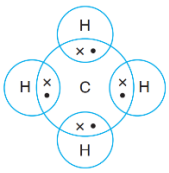
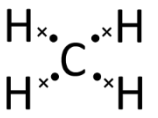
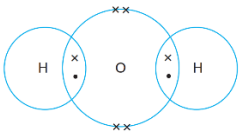
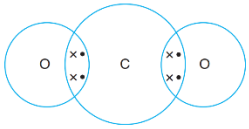
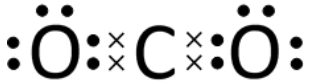
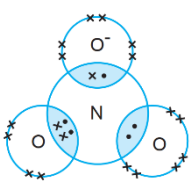
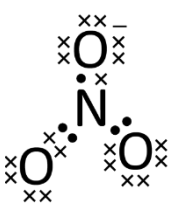
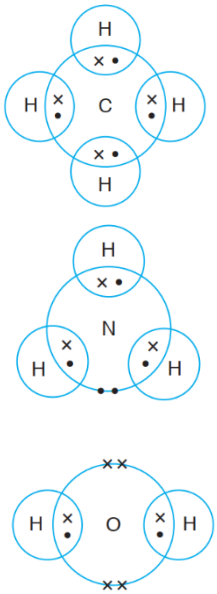
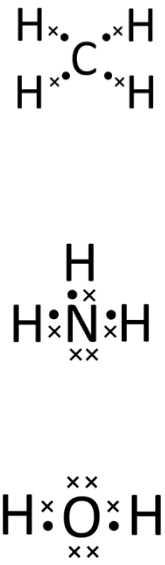
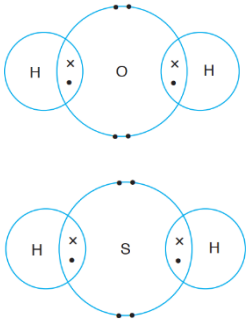
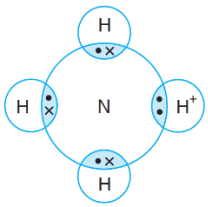
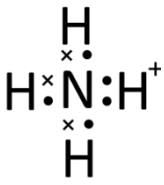
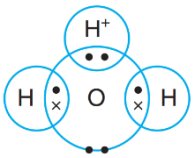
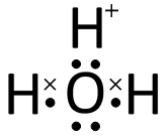
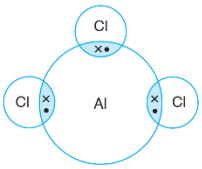
Title: **STRATEGIC STPM PRE-U TEXT CHEMISTRY SEMESTER 1 (2025)**
Book Code: **AAEVSC2575031A1**
Author: **Lee Sze Yien, Ng Kwok Wen, Peh Kok Hua, Goh Kuan Han, Chong Boon Weng**

Page number	Section	Error	Correction
4	**1.1**	8. 	
63	**3.2**	4. 	
		5.  Carbon tetrachloride, CCl_4  Water, H_2O	 Carbon tetrachloride, CCl_4  Water, H_2O
64	**3.2** *Double bonds*	1. 	
		3.  	 
	Triple bond	2. 	

		4. 	
65	*Lewis Diagram for Ions*	4.(b) 	
		5.   	  
66	*Exception to the Octet Rule*	2 (a)  (b)  (c) 	  

67		Lewis diagram of SF_6 	
		5. 	
86	*Hybridisation and Multiple Bonds*	1. 	
88	*The Triple Bond*	1. 	
		4. 	
91	*Predicting the Shapes of Molecules from the Lewis Diagram*	2. (a) 	
		3. (a) 	
		4. (a) 	
92		5. (a) 	

95	*Effect of Lone Pairs on Bond Angle*	1. 	
96	*Bond angle and Electronegativity*		
108	*The Coordinate Bond*	6. (d) 	
		7. 	
		8. 	

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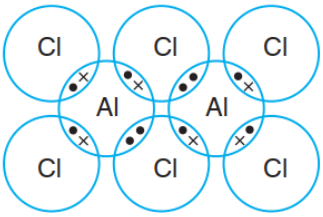
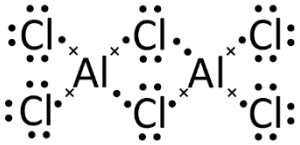
 
</td><td>  </td></tr>
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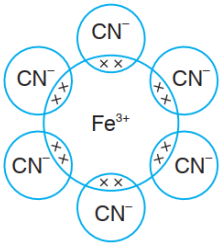
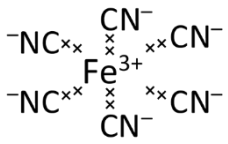
 
</td><td>  </td></tr>
<tr><td>162</td><td>4.2 Reaction of Period 3 Elements with Oxygen</td><td>
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<tr><td>Element</td><td>Si</td><td>P</td><td>S</td></tr>
<tr><td>Oxide</td><td>SiO_2</td><td>P_4O_6
P_4O_{10}</td><td>SO_2
SO_3</td></tr>
<tr><td>Oxidation state of element</td><td>+4</td><td>+3
+5</td><td>+4
+6</td></tr>
<tr><td>Physical state</td><td>Liquid
Gas</td><td>Gas</td><td>Gas
Liquid</td></tr>
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</td><td>
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+5</td><td>+4
+6</td></tr>
<tr><td>Physical state</td><td>Solid</td><td>Liquid
Solid</td><td>Gas</td></tr>
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</td></tr>
<tr><td>168</td><td>4.3 Acidic and Basic Properties of Period 3 Oxides</td><td>6.(b) $P_4O_{10}(l) + 6H_2O(l) \rightarrow 4H_3PO_4(aq)$</td><td>6.(b) $P_4O_{10}(s) + 6H_2O(l) \rightarrow 4H_3PO_4(aq)$</td></tr>
<tr><td rowspan="2">225</td><td rowspan="2">7.2 Chemical Properties of Halides</td><td>7.
7. Similarly, heating solid potassium iodide with concentrated sulphuric acid produces hydrogen iodide (white fumes) and iodine (violet fumes).
$KI(s) + H_2SO_4(aq) \xrightarrow{\Delta} KHSO_4(aq) + HI(g)$
$2HI(g) + H_2SO_4(aq) \xrightarrow{\Delta} I_2(g) + SO_2(g) + 2H_2O(g)$
<table>
<tr><td>Solid halide</td><td>NaCl</td><td>KBr</td><td>KI</td></tr>
<tr><td>Reaction with concentrated H_2SO_4</td><td>White fumes</td><td>White fumes + reddish brown fumes</td><td>White fumes + violet fumes</td></tr>
</table>
Add one important equation</td><td>$8HI(g) + H_2SO_4(aq) \rightarrow 4I_2(g) + H_2S(g) + 4H_2O(l)$

$H_2S(g)$: The most reduced product with rotten egg smell.</td></tr>
<tr><td>8.
8. As a result, concentrated sulphuric acid is not a suitable agent for the preparation of hydrogen bromide and hydrogen iodide. Instead, concentrated phosphoric acid, H_3PO_4, which is non-oxidising is used instead.
$KBr(s) + H_3PO_4(aq) \xrightarrow{\Delta} HBr(g) + KH_2PO_4(aq)$
$KI(s) + H_3PO_4(aq) \xrightarrow{\Delta} HI(g) + KH_2PO_4(aq)$</td><td>$H_3PO_4$</td></tr>
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