
Name: _____

Student Number: _____

CHEM 110 – Quiz 4 – 14th May 2014

For each of the following questions, circle the correct answer.

1. How many electron domains are there in XeOF₄?

A 2

B 4

C 5

D 6

(1)

2. Which of the following has a square planar molecular geometry

A CH₄

B SF₆

C XeF₄

D H₂O

(1)

3. Why is the CCl₄ molecule non-polar?

A There is a difference in electronegativity between the carbon and the chlorine

B The overall dipole moment is equal to zero

C It has a tetrahedral electron domain geometry

D It has a bent molecular geometry

(1)

4. Which of the following numbers represent the possible oxidation states for hydrogen?

A +1, 0, and -1

B +1 and 0

C +1, +½, and 0

D None of the above are correct

(1)

Name: _____

Student Number: _____

CHEM 110 – Quiz 4 – 16th May 2014

For each of the following questions, circle the correct answer.

1. How many electron domains are there in XeF₄?

A 6

B 5

C 4

D 3

(1)

2. Which of the following molecules has an octahedral molecular geometry?

A PF₅

B SF₆

C XeOF₄

D NH₃

(1)

3. Why is the CHCl₃ molecule polar?

A There is a difference in electronegativity between the carbon and the chlorine

B The overall dipole moment for the molecule is greater than zero

C It has a tetrahedral electron domain geometry

D It has a tetrahedral molecular geometry

(1)

4. Which of the following statements regarding hydrogen is false?

A Hydrogen has 3 oxidation states

B Hydrogen can form non-stoichiometric compounds

C There are four known isotopes of hydrogen

D Hydrogen can be produced from coal

(1)