Course No: DMED 1207 Course Title: General Chemistry Date: / /2018 No. of Questions: (5) Time: 1 hours Using Calculator (Yes)	University of Palestine First Exam 2017/2018	Instructor Name: Student No.: _____ Student Name: _____ College Name: _____ Dep. / Specialist: _____ Using Dictionary (No) Total Grade: 15

Question I. Define the following terms " 2 Marks"

1. **Homogeneousmixture:**

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2. **Anion:**

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3. **Molecularformula:**

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4. **Compound:**

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Question II. True Or False (3 Marks)

1. Elementsof the same group are similar in electronic configuration ( ) .
2. The electron tend to goto high energy shell( ).
3. The elements of (2A) group tend to give away one electron ( ).
4. Nucleus of an atom contains electrons and protons ( ) .
5. Many compounds have same molecular and empirical formula. ( ) .
6. Mole is weight of Avogadro's No. of atoms ( ) .

Question III. Choose the correct answer (5 Marks)

1. The Electron configuration of $[Cu^{29}]^{+2}$ is
   a. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^9$ b. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^7$
   c. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$ d. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^3 3d^8$

2. **How many electrons are in the following isotope** X_{44}^{56}

a . **100** **b .** 44 **c .** 65 **d .** 12

3. **What is the mass percent of sulfur (s) in** $Al_2(SO_4)_3$**?(Al=27 , S=32 ,O= 16)**

a . 28% **b** . 24% **c .** 38% **d .** 40%

4. **Which formula shows the true composition of the compound is**

a . Molecular formula **b** . Empirical formula

c . Structural formula **d .** None

5. **How many mm are in 5.3cm**

a. 0.00053 **b**. 53

b. 5.3 **d**. 0.053

6. **Which of the following is a physical property**

a . density **b** . color **c .** conductivity **d** . all

7. **Which of the following is chemical property**

a . oxidation number **b**. mass **c** . boiling point **d** . none

8. **The oxidation number of the 2nd group is**

a . -1 **b .** +1 **c .** +3 **d .** +2

9. **How many protons are in the following isotope** X_{61}^{115}

a . 115 **b** . 54 **c .** 61 **d .** 176

10. **The mole ratio of C in C2 H6 is**

a . 20% **b .** 25% **c .** 30% **d .** 40%

Question IV. Convert (-25F) into C and K (2 Marks)

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Question V. Do as requested (3 Marks)

$Al + Fe_2O_3 \rightarrow\rightarrow\rightarrow Al_2O_3 + Fe$

a . Balance the following equation

b. How many moles of Al_2O_3 are produced from reaction of 55 g of Fe_2O_3 ?

c. How many grams of Fewill be produced from reaction of 22 g of Al ?

atomic w.t of Fe = 55g , atomic w.t of AL = 27 g ,atomic w.t of O = 16g

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End of Questions

Good Luck