Course No: DMED 1207	**University of Palestine**	**Instructor Name:**
Course Title: General Chemistry-Final Exam		**Student No.: _____**
Date:11 /01 /2017		**Student Name: _____**
No. of Questions: (8)	**Final Exam 2016/2017**	**College Name: _____**
Time: 2 hours		**Dep. / Specialist: _____**
Using Calculator (Yes)		**Using Dictionary (No)**
		Total Grade (50)

I. Define the following: (10 Marks)

1) **Concentration**

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2) **Ionization energy**

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3) **Electronegativity**

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4) **Oxidation number**

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5) **Isotopes**

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6) **Osmotic Pressure**

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7) **Covalent bound**

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8) **Super saturated Solution**

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9) **Diffusion**

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10) **Molecular Formula**

II. Answer with True or False (10 Marks)

1. ( ) atmosphere is the weight of Colum of mercury has a height of 0.5 m on 1 cm^2 .
2. ( ) the bases have PH level below 7.
3. ( ) A neutron has no net electric charge.
4. ( ) The nitrogen (N) more electro negativity than fluorine(F) .
5. ( ) the covalent bond strong than ionic bond.
6. ( ) Ionization energy needed to unchain electron from the 4th shell is less than that it will be needed in 3rd shell.
7. ( ) atomic number indicates the number of electrons of an atom.
8. ( ) the vapor pressure of a volatile liquid is low.
9. ( ) the pressure increase as the temperature increase .
10. ( ) ionization energy needed to unchain electron from the 4 th shell is less than that will be need in 3rd .

III. Choose the most appropriate answer (10 marks)

1. The vapor pressure of a volatile liquid comparing with anon volatile one is:
   a. Lower c. Higher
   b. Equal d.None of the above
2. The boiling point of a pure solvent comparing with that of a solid dissolved in this solvent is :
   a. Lower c. Higher
   b. Equal d.None of the above
3. What is the % (w/ v) of solution if 6g dissolved in 10 ml solution:
   a. 50% c. 60%
   b. 70% d.80%
4. The solution boils when a vapor pressure:
   a. Vapor pressure of the solution is higher than the atmospheric pressure.
   b. Vapor pressure of the solution is equal to the atmospheric pressure.
   c. Vapor pressure of the solution is lower than the atmospheric pressure.
   d. None of the above
5. What the Molarity of 3 grams of HCL in 250 ml solution is :
   (a.w.tCL=35 g. a.w.tH=1 g
   a. 0.66 M c. 0.33 M.
   b. 3 M d.6 M

6. **Which the right formula of the following compound :**

   a. $mgso_4$ **c. so4mg**

   b. $smgo_4$ **d. o_4smg**

7. **When salt (Nacl)is added to ice (H_2O) the expected freezing point is:**

   a. 10 **c. 0 C°**

   b.5 C° **d.-10 C°**

8. **When we add aceton to water the vapor pressure in the mixture :**

   a. increase **c. the same**

   b. decrease **d. diffusion**

9. **Water and salt mixture boils at nearly :**

   a.120 C° **c. 0 C°**

   b.70 C° **d. none**

10. **The type of bond in C_2H_2 is :**

   a. single **c. triple**

   b. double **d . ionic**

IV. Find the oxidation number of the underlined element in the compounds (2.5 mark)

1. **C_2H_5OH** ----------

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2. **IF_5** ----------

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3. **Fe_3O_4** ----------

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4. **$BamnO_4$** ----------

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5. **Hg_2CL_2**----------

V. What is the types of bonding are in these compounds or ionic groups and compare strength of ionic ones (5 mark)

1. **MgBr2** **(----------).**
2. **Zn(OH)2** **(----------).**
3. **O2** **(----------).**
4. **. NH3** **(----------).**
5. **. (SO4)-2** **(----------).**

VI. Compare between the following ionic compound & covalent compound (2.5 marks)

		Ionic Compounds	Covalent Compounds
1.	Melting Point		
2.	Conductivity		
3.	Solubility		
4.	Strength of Bond		
5.	Electronegativity		

VII . What is the type of these reactions (5 marks)

1- $CaCl_2(aq) + Na_3PO_4(aq) \rightarrow Ca_3(PO_4)_2(s) + NaCl(aq)$ **(…… ….……..)**

2- $Zn + HCl\ (aq) \rightarrow ZnCl_2\ (s) + H_2(g)$ **(…..……...)**

3- $2Cu + O_{2(g)} \rightarrow 2CuO$ **(…… …….)**

4- $N_2(g) + 3H_2(g) \rightarrow 2NH_3(g)$ **(…….)**

5- $HCl + NaOH \rightarrow NaCl + H_2O$ **(……..…….)**

VIII -Solve the following question (5 marks)

$$Fe_2O_3 + 3CO \rightarrow Fe + CO_2$$

A. Balance this equation.

B. When 2 mole of Fe2O3 react with the carbon monoxide (CO) , what is the weight of iron (Fe) can be produced ?

C. How many grams of CO_2 produced if 14 grams CO are reacted ?

atomic w.t of Fe = 56g

atomic w.t of O = 16g

atomic w.t of C = 12g

End of Questions
Good Luck

These questions for students whose absent on second exam:

Question I.: Convert (-333F) into C and K (5Marks)

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Question V. Do as requested (10 Marks)

a . Balance the following equation

$$Fe_2O_3 + HCL \rightarrow\rightarrow\rightarrow FeCl_3 + H_2O$$

b. How many moles of $FeCl_3$ are produced from reaction of 100 g of Fe_2O_3 ?

c. how many grams of H_2O will be produced from reaction of 73 g of HCL ?

atomic w.t of Fe = 55g , atomic w.t of CL = 35.5 g , atomic w.t of H= 1g

atomic w.t of O = 16g

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