

Course No: DMED 1207
Course Title: General Chemistry-
Final Exam
Date: 13/01/2018
No. of Questions: (8)
Time: 2 hours
Using Calculator (Yes)

University of
Palestine

Final Exam
2018/2017

Instructor Name:
Student No.: _____
Student Name: _____
College Name: _____
Dep. / Specialist: _____
Using Dictionary (No)
Total Grade (50)

I. Define the following: (10 Marks)

1) Oxidation number

2) Ionization energy

3) Electronegativity

4) Concentration

5) Isotopes

6) Osmotic Pressure

7) Covalent bond

8) Diffusion

9) Molecular Formula

10) Super saturated Solution

II. Answer with True or False (10 Marks)

1. () atmosphere is the weight of Column 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
 - b. Equal
 - c. Higher
 - 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
 - b. Equal
 - c. Higher
 - d. None of the above
3. What is the % (w/ v) of solution if 6g dissolved in 10 ml solution:
 - a. 50%
 - b. 70%
 - c. 60%
 - 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
 - b. 3 M
 - c. 0.33 M.
 - d. 6 M

6. Which the right formula of the following compound :

- a. mgso_4 c. so_4mg
b. smgo_4 d. o_4smg

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

- a. 10 C° c. 0 C°
b. 5 C° d. -10 C°

8. When we add acetone 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. $\underline{\text{C}}_2\text{H}_5\text{OH}$ -----

2. $\text{Na}\underline{\text{I}}\text{O}_3$ -----

3. $\underline{\text{Fe}}_3\text{O}_4$ -----

4. $\text{Ba}\underline{\text{Mn}}\text{O}_4$ -----

5. $\underline{\text{Hg}}_2\text{Cl}_2$ -----

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. Na₂(SO₄) (-----).

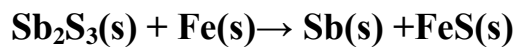
VI. Compare between the following ionic compound & covalent compound (2.5 marks)

		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- $\text{CaCl}_2(\text{aq}) + \text{Na}_3\text{PO}_4(\text{aq}) \rightarrow \text{Ca}_3(\text{PO}_4)_2(\text{s}) + \text{NaCl}(\text{aq})$ (.....)
- 2- $\text{Zn} + \text{HCl}(\text{aq}) \rightarrow \text{ZnCl}_2(\text{s}) + \text{H}_2(\text{g})$ (.....)
- 3- $2\text{Cu} + \text{O}_2(\text{g}) \rightarrow 2\text{CuO}$ (.....)
- 4- $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \rightarrow 2\text{NH}_3(\text{g})$ (.....)
- 5- $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ (.....)

VIII -Solve the following question (5 marks)



1.Balance this equation?

2.When 3 mole of Sb_2S_3 react with Fe , what is the weight of FeS can be produced ?

3. How many grams of Sb produced if 25 grams Fe are reacted ?

atomic w.t of Fe = 56g

atomic w.t of Sb = 122g

atomic w.t of S = 32g

A series of 28 horizontal dashed lines intended for writing answers.

**End of Questions
Good Luck**

