


Course No: DMED 1207
Course Title: General Chemistry-
Final Exam
Date: / 5 / 2018
No. of Questions: (8)
Time: 2 hours
Using Calculator (Yes)

University of
Palestine

Final Exam
2018/2017

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

I. Define the following: (5 Marks)

1) Oxidizing Agent

2) Ionization energy

3) Weak acid

4) Reduction

5) Isotopes

6) Osmotic Pressure

7) Irreversible Reaction

8) Unsaturated Solution

9) Diffusion

10) Atomic weight

II. Answer with True or False (10 Marks)

1. () Ionization energy needed to unchain electron from the 4th shell is less than that it will be needed in 3rd shell.
2. () The solution boils when the vapor pressure of the solution is equal to the atmospheric pressure.
3. () In solution, when we increase the temperature we have a low vapor pressure
4. () Attractive forces between molecules in solids are less than that of either liquids and gases.
5. () Metals are easily oxidized
6. () Electro negativity of F is more than Br
7. () Acids reacts with metals to give CO₂ .
8. () Strong acids are a good electricity conductor .
9. () Irreversible reaction occurs in weak acid and base .
10. () In free elements each atom has an oxidation number of zero

III. Choose the most appropriate answer (10 marks)

1. What happened if we add nonvolatile substance to ice:
a. elevation of boiling point c. elevation of freezing point
b. depression of freezing point d. depression of boiling point
2. The expected boiling point of a volatile substance added to water is:
a.110 c.90
b. 100 d.zero
3. Membrane which is semipermeable enter molecules_ :
a. Bigger size c. Smaller size
b. Different size d.None of the above
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. How would you prepare 12% (w/v) glucose solution in 200 ml solution ?

- a. 15g glucose
- b. 7.5 g glucose +142.5 g distilled H₂O
- c. 24 glucose
- d. 24 g H₂O

6. What is the concentration of a dilute solution his volume is 350 ml starting with a stock solution of 10 M HCL and volume 150 ml :

- a . 4.3 L
- b. 0.01ml
- c. 0.24M
- d. 4.3 M

7. reaction of some metals with acids gives:

- a. H₂O
- b. H₂
- c. O₂
- d. N₂

8. The element which gives electrons is:

- a. reducing agent
- b. oxidizing agent
- c. buffer
- d. solvent

9. What is the molarity 9 g KOH, was dissolved in 125 mL water? F.wt KOH=56:

- a. 1.28 M
- b. 1.1 mol / L
- c. 0.27 m
- c. 1.25M

10.The Electron configuration of [Al ¹³]⁺² is

- a. 1s²2s²2p⁶3s²3p⁶
- b. 1s²2s²2p⁶3s²
- c. 1s²2s²2p⁶3s²3p³
- d. 1s²2s²2p⁶3s¹

IV. Find the oxidation number of the underlined element in these compounds (5 mark)

1. (MnO₄)⁻²

.....

2. BrF₅

.....

3. Al₂O₃

.....

4. HOCl

.....

5. (Cr₂O₄)⁻²

.....

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

1. Ca_2CO_3 (-----).

2. O_2 (-----).

3. $\text{Ag}(\text{NO}_3)$ (-----).

4. LiOH (-----).

5. C_2H_2 (-----).

VI. Compare between the following ionic compound & covalent compound (5 marks)

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

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

1. (.....) $\text{NaN}_3(\text{s}) \rightarrow \text{Na}(\text{s}) + \text{N}_2(\text{g})$

2. (.....) $\text{HBr}(\text{aq}) + \text{NaOH}(\text{aq}) \rightarrow \text{H}_2\text{O}(\text{l}) + \text{NaBr}(\text{s})$

3. (.....) $\text{CO}_2(\text{g}) + \text{Mg}(\text{s}) \rightarrow \text{MgCO}_3(\text{s})$

4. (.....) $\text{Na}_2\text{SO}_4(\text{aq}) + \text{Pb}(\text{NO}_3)_2(\text{aq}) \rightarrow \text{PbSO}_4(\text{s}) + \text{NaNO}_3(\text{aq})$

5. (.....) $\text{Mg}(\text{s}) + 2\text{HCl}(\text{l}) \rightarrow \text{MgCl}_2(\text{s}) + \text{H}_2(\text{g})$

VIII. Solve the following question (5 marks)

The reaction is a.w.t H=1g , a.w.t C=12 g , a.w.t O=16 g.



1- balance the equation?

2- How many grams of O₂ are required to react with 188g C₂H₄ ?

3- How many grams of H₂O produced if 99 grams of CO₂ evolved?

**End of Questions
Good Luck**