Krystal's Exam #1A (100%) and Bart (100%)

eConcordia

14:57

Back to My eConcordia

1 - What are the coefficients for the reactants and the products when the equation for the reaction:
$FeC\ell_3$ (aq) + NaOH (aq) → $Fe(OH)_3$ (s) + $NaC\ell$ (aq)
Is balanced?

- ○ 1, 1, 1, 1
- ◉ 1, 3, 1, 3
- ○ 2, 6, 2, 6
- ○ None of the above

2 - What is the mass in grams of 6.022×10^{23} atoms of sulfur?

- ○ 6.022×10^{23} g
- ◉ 32.06 g
- ○ 6.022 g
- ○ 1.022×10^{23} g

3 - Sulfur trioxide has the formula:

- ◉ SO_3
- ○ S_2O_6
- ○ S_3O
- ○ None of the above

4 - How many liters (expressed in scientific notation and with appropriate number of significant figures) are there in 5.00 μL

- ◉ 5.00×10^{-6} L
- ○ 50.00×10^{-5} L
- ○ (500/1000) L
- ○ 0.500×10^{6} L

5 - After performing a calculation, Frank's calculator displayed the result as 5.25916. If the answer can have only three significant figures and must be expressed using scientific notation, it should be reported as:

- ○ 5.25
- ○ 5.25×10^{0}
- ○ 0.525×10
- ◉ 5.26×10^{0}

6 - Element with an atomic number of 54 is a:

- ○ Metal
- ◉ Non-metal
- ○ Metalloid
- ○ None of the above

7 - The molar mass of ethanol (C_2H_5OH) is given by:

- ○ 92.12 g/mol
- ◉ 46.06 g/mol
- ○ 23.03 g/mol
- ○ 46.06

8 - If 5.0 mL of a liquid has a mass of 4.90 g, its density (mass/volume; expressed in scientific notation with appropriate nur of significant figures and correct unit) is:

- ○ 0.98 g/mL
- ◉ 9.8×10^{-1} g/mL
- ○ 98.0×10^{-2} g mL^{-1}
- ○ 9.80×10^{-1} g/mL

9 - In the Periodic Table, the elements Na, Mg, Al, Si, P, S, Cl and Ar belong to the same:

- ○ Sector
- ◉ Period
- ○ Group
- ○ Family

10 - The correct name for H_2O_2 is:

- ○ Dihydrigen dioxide
- ◉ Hydrogen peroxide
- ○ Oxygenated water
- ○ Dioxygen dihydride

11 - If an atom contains two protons and two electrons it is:

- ○ A cation
- ○ An anion
- ○ An ion
- ◉ An atom with no charge

12 - Anions are formed by the:

- ◉ Gain of electrons
- ○ Loss of electrons
- ○ Loss of neutrons
- ○ Gain of protons

13 - An object had a mass of 7.2877 g when weighed on an analytical balance. The uncertain digit in the measurement is:

- ◉ 7
- ○ 8
- ○ 2
- ○ None of the above

14 - The final answer for the calculation, $(5.173 \times 10^5) \times (11.5 \times 10^2)$ contains:

- ○ 4 significant figures
- ◉ 3 significant figures

- ○ 1 significant figure
- ○ 10^6 significant figures

15 - The smallest volume is represented by:

- ○ 1.0 L
- ○ 1000 mL
- ◉ 1.0×10^4 µL
- ○ 1.0×10^4 cm^3

☑ **I am ready to submit my answers**

VICTOR'S EXAM #1B (100%)

eConcordia

14:38

Back to My eConcordia

1 - What are the coefficients for the reactants and the products when the equation for the reaction:
$Na\ (s) + H_2O\ (\ell) \rightarrow NaOH\ (aq) + H_2\ (g)$
is balanced?

- ○ 1, 1, 1, 1
- ◉ 2, 2, 2,1
- ○ 1, 2, 1, 2
- ○ 4, 4, 4, 2

2 - The mass in grams of one mole of carbon atoms is:

- ○ 6.02 g
- ◉ 12.011 g
- ○ 24.04 g
- ○ 48.12 g

3 - Ammonium sulfate has the formula:

- ○ NH_4SO_4
- ○ $(NH_4)_2\ (SO_4)_2$
- ◉ $(NH_4)_2SO_4$
- ○ $NH_4\ (SO_4)_2$

4 - A quantity of 5.44 mg of a substance can be expressed in scientific notation as:

- ◉ 5.44×10^0 mg
- ○ 5.4×10^0 mg
- ○ (544/100) mg
- ○ 0.54×10 mg

5 - After performing a calculation, Peter obtained the result as 7.03961 mL. If the answer can have only three significant figu and must be expressed using scientific notation, it should be reported as:

- ◉ 7.04×10^0 mL
- ○ 0.703×10 mL
- ○ 7.04
- ○ 70.4/10 mL

6 - Pure gold is classified as:

- ○ An ion
- ◉ An element
- ○ A compound
- ○ A molecule

7 - What is the mass in grams of 6.022×10^{23} atoms of chlorine?

- ○ 6.022×10^{23} g
- ◉ 35.453 g
- ○ 6.022 g
- ○ 1.022×10^{23} g

8 - If the density of a substance is 8.140 g/mL, what is the volume in milliliters of a piece of this substance with a mass of 1
g?

- ○ 0.526 mL
- ◉ 1.899×10^{0} mL
- ○ 3.73 mL
- ○ 1.26×10^{2} mL

9 - In the Periodic Table, the alkali metals are in the same:

- ◉ Group
- ○ Period
- ○ Section
- ○ None of the above

10 - The correct name for $Fe(OH)_3$ is:

- ○ Iron hydroxide
- ○ Iron trihydroxide
- ◉ Iron (III) hydroxide
- ○ Trihydroxide of iron

11 - An atom has 11 protons, 10 electrons and 12 neutrons. The atom is:

- ○ Neutral
- ◉ Positively charged
- ○ Negatively charged
- ○ None of the above

12 - A neutral atom containing 20 protons and 40 neutrons loses two electrons. The species formed is:

- ○ An anion
- ◉ An ion having a charge of 2+
- ○ Neutral
- ○ An ion having a charge of 2-

13 - Patrick saw 3 cats in his backyard. The number has:

- ○ 1 significant figure
- ○ 0 significant figure
- ◉ Infinite number of significant figures
- ○ 3 significant figures

14 - An object had a mass of 14.1763 g when weighed on an analytical balance. The uncertain digit in the measurement is:

- ○ 1
- ○ 8

- ○ 6
- ◉ 3

15 - The volume of a room measuring 6.5 m × 6.2 m × 3.0 m is given by:

- ○ 120.9 m^3
- ○ 120.9
- ○ 1.21×10^2 m^3
- ◉ 1.2×10^2 m^3

☑ **I am ready to submit my answers**

Elissa and Jen and Elvina (100%) Quiz #1C

eConcordia

14:57

Back to My eConcordia

1 - What are the coefficients for the reactants and the products when the equation for the reaction:
$Zn\ (s) + HCl\ (aq) \rightarrow ZnCl_2\ (aq) + H_2\ (g)$
is balanced?

- ○ 1, 1, 1, 1
- ◉ 1, 2, 1, 1
- ○ 1, 2, 1, 2
- ○ 2, 4, 2, 2

2 - The mass in grams of one mole of silicon atoms is:

- ◉ 28.08 g
- ○ 56.16 g
- ○ 14.04 g
- ○ 42.12 g

3 - Calcium sulfate has the formula:

- ◉ $CaSO_4$
- ○ $Ca_2\ (SO_4)_2$
- ○ $Ca(SO_4)_2$
- ○ CaS_2O_8

4 - The length of an object is 2.0×10^9 nm. Expressed in meters (in scientific notation with correct number of significant figu the length is:

- ○ 2.00×10^0 m
- ○ 2.0×10^{-18} m
- ◉ 2.0×10^0 m
- ○ 2 m

5 - After performing a calculation, Susan's calculator displayed the result as 5.23961 mL. If the answer can have only three significant figures and must be expressed using scientific notation, it should be reported as:

- ◉ 5.24×10^0 mL
- ○ 0.524×10 mL
- ○ 5.24
- ○ 52.4/10 mL

6 - Pure copper is:

- ○ An ion
- ◉ An element
- ○ A compound
- ○ A molecule

7 - What is the mass in grams of 6.022×10^{23} atoms of carbon?

- ○ 6.022×10^{23} g
- ◉ 12.011 g
- ○ 6.022 g
- ○ 1.022×10^{23} g

8 - If 5.60 g of a liquid has a volume of 11.2 mL its density is:

- ○ 2.0 mL/g
- ○ 5.0×10^{-1}
- ◉ 5.00×10^{-1} g/mL
- ○ 5.0×10^{-1} g/cm^3

9 - In the Periodic Table, the halogens are in the same:

- ◉ Group
- ○ Period
- ○ Section
- ○ None of the above

10 - The correct name for Na_2CO_3 is:

- ○ Sodium bicarbonate
- ◉ Sodium carbonate
- ○ Sodium (II) carbonate
- ○ Disodium monocarbonate

11 - A neutral atom contains 13 protons and has a mass number of 27. The number of neutrons in the atom is:

- ○ 40
- ○ 13
- ○ 27
- ◉ 14

12 - If an atom has 8 protons and 10 electrons it is:

- ○ A cation
- ◉ An anion
- ○ Atom with no charge
- ○ None of the above

13 - Which of the following is the SI base unit for length?

- ○ Feet
- ◉ Meter
- ○ Inch
- ○ None of the above

14 - Object X covered a certain distance in 1.6×10^{-9} s whereas to cover the same distance, object Y took 4.8 ns. Which of following statements is correct:

- ○ X and Y are moving with the same speed

- ○ X is moving at half the speed of Y
- ○ Y is moving faster than X
- ◉ X is moving at three times the speed of Y

15 - An object had a mass of 5.3876 g when weighed on an analytical balance. The uncertain digit in the measurement is:

- ○ 7
- ○ 8
- ○ 5
- ◉ 6

☑ **I am ready to submit my answers**

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09:56 100% - Exam #2A

Back to My eConcordia

1 - The mere presence of a causative agent constitutes a hazard. It is hazardous in all circumstances.
- ○ True
- ◉ False

2 - A diver working at a depth of 8,000 meters may be exposed primarily to which of the following agents?
- ○ Biological
- ◉ Physical
- ○ Chemical
- ○ None of the above

3 - The hazard posed by concentrated solutions of potassium permanganate (an oxidizing agent) is classified as:
- ○ Physical
- ◉ Chemical
- ○ Biological
- ○ Ergonomic

4 - Which of the following statement is true for acute toxicity?
- ◉ Results from brief exposure to high contaminant levels
- ○ Much more difficult to study
- ○ Results from low and repeated exposure over a long period of time
- ○ May have latency periods

5 - In the implementation of WHMIS, suppliers must provide hazard information through:
- ○ Labels only
- ○ MSDSs only
- ◉ Labels & MSDSs
- ○ Telephone calls

6 - Chemicals causing changes in DNA are known as:
- ○ Carcinogens
- ◉ Mutagens
- ○ Teratogens
- ○ Irritants

7 - Incomplete combustion of oil generates:
- ○ Dust
- ○ Fume
- ◉ Smoke
- ○ Gas

8 - The abbreviation TLV stands for:

- ○ Time Limit Value
- ○ Toxic Limit Value
- ◉ Threshold Limit Value
- ○ To line up for value

9 - The unit used to express exposure to vapors is:

- ○ m^3/L
- ○ L
- ◉ ppm
- ○ All of the above

10 - Most common natural routes of entry of chemical agents into the body include:

- ○ Respiratory tract
- ○ Digestive tract
- ○ Skin
- ◉ All of the above

☑ **I am ready to submit my answers**

Bart + Krystal + Victor + Elvina

09:57 100% - Exam #2B

Back to My eConcordia

1 - A causative agent is hazardous only in certain circumstances.
- (•) True
- ( ) False

2 - A doctor working in an area with the possibility of exposure to X-rays is at risk of being exposed to which of the following agents?
- ( ) Chemical
- (•) Physical
- ( ) Biological
- ( ) None of the above

3 - The hazard posed by nitric acid (a corrosive and oxidizing material) is classified as:
- ( ) Ergonomic
- ( ) Biological
- ( ) Physical
- (•) Chemical

4 - Which of the following statements is false:
- ( ) Severe damage to eyes may result from excessive exposure to ultraviolet radiation
- ( ) Microwaves do not penetrate appreciably below the skin
- ( ) X-Rays are highly penetrating and damaging to body tissue
- (•) Radiation can be detected by human senses

5 - WHMIS was implemented with the goal to:
- ( ) Increase the incidence of illnesses and injuries caused by hazardous materials in the workplace
- ( ) Catch those who pollute the environment
- ( ) Collect more taxes
- (•) None of the above

6 - Habit forming depressants are classified as:
- ( ) Asphyxiants
- ( ) Anasthetics
- (•) Narcotics
- ( ) Irritants

7 - Extremely fine particles of zinc oxide formed during welding (a high temperature process) are an example of:
- ( ) Vapor
- (•) Fume
- ( ) Smoke
- ( ) Mist

8 - A mountain climber at an altitude of 6000 meters may be subjected to pressure conditions described as:

- ○ Atmospheric
- ○ Hyperbaric
- ◉ Hypobaric
- ○ Hyperatmospheric

9 - The abbreviation WHMIS stands for:

- ○ World Human Migration Institute Stand
- ◉ Workplace Hazardous Materials Information System
- ○ Workplace Helpful Materials Indexing System
- ○ None of the above

10 - The unit used to express exposure to particles is:

- ◉ mg/m^3
- ○ mL
- ○ mg
- ○ All of the above

☑ **I am ready to submit my answers**

eConcordia

09:57

100% - Exam #2C

Back to My eConcordia

1 - Workplace walk-through surveys are performed to:

- ○ Meet the new workers
- ○ Play cards with the workers
- ○ Pass the newspaper around
- ◉ Recognize the potential impact of workplace hazards

2 - A fire fighter trying to put out a fire at a chemical factory is exposed to which of the following agent(s)?

- ○ Chemical only
- ○ Physical only
- ○ Biological only
- ◉ Physical and chemical

3 - Ergonomic stresses arise as a result of optimal adjustment between the worker and the work or workplace.

- ◉ False
- ○ True

4 - Which of the following statements is false for chronic toxicity?

- ◉ Results from brief exposure to high concentrations of the contaminant
- ○ Responses generally have latency periods
- ○ Responses are difficult to observe and relate
- ○ Results from low and repeated exposure over a long period of time

5 - According to WHMIS, the cost of effective worker training must be paid by:

- ◉ Employer
- ○ Employee
- ○ Supplier
- ○ Regulators

6 - Chemicals causing malformation in newborns are known as:

- ○ Carcinogens
- ○ Mutagens
- ◉ Teratogens
- ○ Irritants

7 - The unit used to express exposure to gases is:

- ○ mL/m^3
- ◉ ppm
- ○ mL
- ○ All of the above

8 - Science that deals with the properties and interactions of physical, chemical and biological agents is called:

- ○ Sociology
- ◉ Toxicology
- ○ Anthropology
- ○ All of the above

9 - The abbreviation MSDS stands for:

- ○ Mechanical Safety Data Sheet
- ◉ Material Safety Data Sheet
- ○ Make Sure Dollars Are Safe
- ○ None of the above

10 - The effects of high intensity noise may cause:

- ○ Feeling of hunger
- ◉ Interference with communication
- ○ Loss of weight
- ○ None of the above

☑ **I am ready to submit my answers**

X

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08:15 Exam # 3A

Back to My eConcordia

1 - A concentration of 51.0 ppb for a gas in air is equal to:
- ○ 5.10×10^{2} ppb
- ◉ 5.10×10^{-2} ppm
- ○ 5.10×10^{5} %
- ○ 5.10×10^{-3} %

2 - Based upon TLV-TWA values (given in parentheses), which of the following poses the most risk:
- ◉ Compound A (2 ppb)
- ○ Compound B (2.5×10^{4} ppb)
- ○ Compound C (100 ppb)
- ○ Compound D (3.0×10^{-4} %)

3 - Capillary action in water makes water in soil available to plants.
- ◉ True
- ○ False

4 - The presence of hydrogen bonding in water accounts for its:
- ◉ Exceptionally high boiling point
- ○ Taste
- ○ Odor
- ○ Color

5 - The production of ground level ozone is due to:
- ◉ Certain photochemical reactions
- ○ Reaction of nitrogen with sunlight
- ○ Reaction of water with oxygen
- ○ All of the above

6 - Nitrogen is a minor component of the air we breathe.
- ○ True
- ◉ False

7 - The concentration of air contaminants is determined by:
- ○ Exposing humans to the contaminant
- ◉ Sampling and analyzing the contaminant
- ○ Exposing animals to the contaminant
- ○ None of the above

8 - The organization responsible for developing TLVs is abbreviated as:
- ◉ ACGIH
- ○ AGCIH
- ○ AHGIC
- ○ ACGHI

9 - A worker is repeatedly exposed to a concentration of 2.5×10^{-4} % of a substance. If the TLV-TWA for the substance is 5.0 ppm, is it a safe work environment for the worker?
- ◉ Yes
- ○ No

10 - Hydrogen bonds in water are:
- ◉ Weaker than covalent bonds
- ○ Stronger than covalent bonds
- ○ Of the same bond strength
- ○ None of the above

☑ **I am ready to submit my answers**

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03:09 Exam #3B

Back to My eConcordia

1 - A concentration of 21.0 ppm for a gas in air is equal to:
- ○ 2.1×10^{-3} %
- ○ 2.10×10^{-6} %
- ○ 2.1×10^{5} %
- ◉ 2.10×10^{-3} %

2 - Which of the following statements is true based upon the information that the TLVs for two chemicals X and Y are 25 ppm and 45 ppm respectively?
- ○ X poses less risk than Y
- ○ Y poses more risk than X
- ○ X and Y pose the similar risk
- ◉ X poses more risk than Y

3 - Oxides of nitrogen in the atmosphere originate both from natural as well as human-made sources.
- ◉ True
- ○ False

4 - The nature of O-H bonds in water is:
- ○ Ionic
- ◉ Covalent
- ○ Nonionic
- ○ Complex

5 - Ozone containing layer of the atmosphere is called:
- ◉ Stratosphere
- ○ Sphere
- ○ Geosphere
- ○ Hydrosphere

6 - Risk characterization integrates the exposure and effects components to estimate the risk.
- ◉ True
- ○ False

7 - Air pollutants are responsible for:
- ◉ Poor air quality
- ○ Improved air quality
- ○ Cooling the air
- ○ None of the above

8 - SO_x represents:
- ○ SO_3 only
- ◉ Mixture of SO_2 and SO_3
- ○ Droplets of H_2SO_4
- ○ Particles of sulfate salts

9 - A worker is repeatedly exposed to a concentration of 2.50×10^{3} ppb of a substance. If the TLV-TWA for the substance is 25 ppm, is it a safe work environment for the worker?
- ◉ Yes
- ○ No

10 - The attractive forces between water molecules are called:
- ◉ Intermolecular
- ○ Nonmolecular
- ○ Intramolecular
- ○ None of the above

☑ **I am ready to submit my answers**

Submit

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04:37 Exam #3C

Back to My eConcordia

1 - If the concentration of SO_2 in air near a pulp and paper mill is 1.5 ppm, what will it be in ppb?

- ○ 1.50×10^3 ppb
- ○ 1.5×10^{-3} ppb
- ◉ 1.5×10^3 ppb
- ○ 1.5×10^{-9} ppb

2 - Based upon TLV-TWA values (given in parentheses), which of the following poses the most risk:

- ○ Compound A (2.0×10^7 ppb)
- ○ Compound B (2.5×10^4 ppm)
- ◉ Compound C (100 ppm)
- ○ Compound D (3.0 %)

3 - Water is a powerful solvent due to its high polarity and hydrogen bonding ability.

- ◉ True
- ○ False

4 - The electron pair in the O-H bond of water is more strongly attracted by the oxygen atom due to its higher:

- ◉ Electronegativity
- ○ Molar mass
- ○ Atomic radius
- ○ None of the above

5 - Exposure to O_3 may cause:

- ◉ Reduced lung function
- ○ Enhanced lung function
- ○ Hair loss
- ○ Memory loss

6 - Nitrogen is a major component of the air we breathe.

- ◉ True
- ○ False

7 - The formation of nitric acid in the atmosphere is due to the oxidation of:

- ◉ NO_x
- ○ SO_x
- ○ CO
- ○ All of the above

8 - NO_x represents:

- ○ NO_2 only
- ◉ Mixture of oxides of nitrogen
- ○ Droplets of HNO_3
- ○ Particles of nitrate salts

eConcordia

06:15 Exam #4 A

Back to My eConcordia

1 - Adequate safety precautions must be taken in using certain household cleaners (such as oven cleaners) because these may contain:
- ○ Water vapor
- ◉ Reactive compounds
- ○ Liquid droplets
- ○ Sharp objects

2 - Non-ionic surfactants are:
- ○ Positively charged
- ○ Negatively charged
- ◉ Neutral
- ○ None of the above

3 - In the process of hair coloring, the desired color is obtained by:
- ○ Oxidation of natural hair pigment
- ◉ Application of an organic synthetic dye
- ○ Setting the hair in the desired shape
- ○ Treating the hair with a reducing agent

4 - Fragrances in perfumes are generally experienced in three stages or notes because of the:
- ◉ Volatility of the ingredients
- ○ Density of the ingredients
- ○ Price of the ingredients
- ○ Color of the ingredients

5 - Sunscreen creams are formulated with additional ingredients to:
- ○ Charge a higher price
- ◉ Absorb certain harmful radiation
- ○ Make them look colorful
- ○ None of the above

6 - Skin moisturizers are used to:
- ○ Color the skin
- ◉ Maintain the moisture content of the skin
- ○ Dry the skin
- ○ Protect it against sharp objects

7 - Pigments are added to lipstick to act as:
- ○ Deodorants
- ○ Surfactants
- ○ Taste boosters
- ◉ None of the above

8 - Cosmeceuticals are believed to be more than simple cosmetics.
- ○ False
- ◉ True

9 - One of the influencing factors in making the chemistry of Personal Care Products an expanding and dynamic field is:
- ○ Lower price
- ◉ Aging population
- ○ Better packaging of these products
- ○ Bulk production

10 - Hardness of water is due to the presence of which ions?
- ○ Na^+ and K^+
- ○ F^- and Cl^-
- ○ Al^{3+} and Br^-

eConcordia

08:05 Exam #4B

Back to My eConcordia

1 - One of the influencing factors in making the chemistry of Personal Care Products an expanding and dynamic field is:
- ○ Lower price
- ◉ Aging population
- ○ Better packaging of these products
- ○ Bulk production

2 - A cationic surfactants is:
- ◉ Positively charged
- ○ Negatively charged
- ○ Both positively and negatively charged
- ○ None of the above

3 - Final step in hair coloring process involves using a:
- ◉ Dye
- ○ Reducing agent
- ○ Bleaching agent
- ○ Conditioning agent

4 - In creating perfumes, the ingredients are blended based upon their:
- ○ Molecular size only
- ◉ Molecular size and volatility
- ○ Volatility only
- ○ Color

5 - Sunscreen products contain chemicals to absorb:
- ○ Microwaves
- ○ Vibration
- ○ Infrared radiation
- ◉ UV Radiation

6 - The effective chemical ingredients in deodorants are:
- ◉ Antibacterial agents and perfumes
- ○ Water and table salt
- ○ Pigments
- ○ Dyes

7 - Skin moisturizers are used to:
- ○ Color the skin
- ○ Dry the skin
- ○ Protect it against sharp objects
- ◉ None of the above

8 - Laundry detergents are formulated by mixing many ingredients because they perform diverse functions.
- ◉ True
- ○ False

9 - The impact of household cleaners on the environment is minimized because these products are formulated:
- ◉ To work with water and end up in wastewater treatment plants
- ○ Free of chemicals
- ○ With natural ingredients only
- ○ To change into environmentally friendly ingredients immediately after use

10 - Hardness of water is due to the presence of which cations?
- ◉ Ca^{2+} and Mg^{2+}
- ○ Na^{+} and K^{+}
- ○ F^{-} and Cl^{-}
- ○ Al^{3+} and Br^{-}

eConcordia

08:12 Exam #4C

Back to My eConcordia

1 - Surface tension of water must be reduced in order for water to:
- (•) Wet a surface effectively
- ( ) Freeze easily
- ( ) Become denser
- ( ) Dissolve more oxygen

2 - Surfactants are effective in:
- ( ) Reducing the density of water
- ( ) Increasing the surface tension of water
- (•) Decreasing the surface tension of water molecules
- ( ) Heating water molecules

3 - Hair conditioners generally contain:
- ( ) Anionic surfactant
- ( ) No surfactant
- (•) Cationic surfactant
- ( ) Water only

4 - Fragrances for perfumes are created by using:
- ( ) Naturally occurring compounds only
- ( ) Synthetic compounds only
- (•) Both natural and synthetic compounds
- ( ) None of the above

5 - Sunscreen creams are formulated with additional ingredients to:
- ( ) Charge a higher price
- ( ) Absorb infrared radiation
- ( ) Make them look colorful
- (•) None of the above

6 - The effective chemical ingredients in deodorants are antibacterial agents to:
- ( ) Culture bacteria
- (•) Destroy bacteria responsible for converting certain compounds to unpleasant odors
- ( ) Mask the unpleasant odors
- ( ) Trap the unpleasant odors

7 - Pigments are added to lipstick to act as:
- ( ) Deodorants
- ( ) Surfactants
- (•) Colorants
- ( ) Taste boosters

8 - An anionic surfactant has a negative charge.
- (•) True
- ( ) False

9 - Adequate safety precautions must be taken in using certain household cleaners (such as oven cleaners) because these may contain:
- ( ) Water vapor
- (•) Reactive compounds
- ( ) Liquid droplets
- ( ) Sharp objects

10 - The oxidizing agent generally used during curling of hair is:
- ( ) H_2O
- (•) H_2O_2
- ( ) O_3

EXAM 5C
(No A or B)

1 - Carbon can form single, double and triple bonds with other elements including carbon.

- (•) True
- ( ) False

2 - The compound with the formula ROR' is:

- ( ) An amine
- ( ) A carboxylic acid
- (•) An ether
- ( ) None of the above

3 - The compound with the formula C_2H_5OH is an:

- (•) Alcohol
- ( ) Ether
- ( ) Amine
- ( ) Ester

4 - How many hydrogen atoms are there in a compound with the formula $CH_3(CH_2)_3NH_2$?

- ( ) 4
- ( ) 9
- (•) 11
- ( ) 8

5 - Cephalosporins are used as:

- ( ) Antiviral drugs
- (•) Antibiotics
- ( ) Anti-inflammatory drugs
- ( ) None of the above

EXAM 5C
(No A or B)

6 - SSRIs are used as:

- Fungicide
- Insecticide
- Growth hormone
- None of the above

7 - The three-drug cocktail treatment (HAART) is used to treat:

- AIDS
- Pneumonia
- Cancer
- Depression

8 - Chemotherapy involves treatment of cancer using:

- Hypnotherapy
- Surgery
- Alkylating agents
- None of the above

9 - Certain steroids are used as anti-inflammatory drugs because these drugs:

- Cost a lot of money
- Are antidepressants
- Emit radiation
- None of the above

10 - The number of carbon atoms in a benzene ring is:

- 6
- 9
- 12
- None of the above

eConcordia

09:55 Exam #6A

Back to My eConcordia

1 - Weakly acidic nature of rain is due to dissolved:

- ○ O_2 (g)
- ○ O_3 (g)
- ○ N_2 (g)
- ◉ None of the above

2 - Gaseous carbon dioxide is generated when limestone reacts with:

- ◉ Acid
- ○ Base
- ○ Water
- ○ Oxygen

3 - A water sample shows a pH of 3.2. The sample is:

- ◉ Acidic
- ○ Neutral
- ○ Colorless
- ○ Basic

4 - The solubility of lead at a pH of 3.2 is higher than at a pH of 9.7.

- ○ False
- ◉ True

5 - Solar energy is an example of a:

- ○ Fossil energy source
- ◉ Non-fossil energy source
- ○ No energy source
- ○ Wind energy source

6 - One of the gases responsible for global warming is:

- ○ CO
- ○ N_2
- ◉ N_2O
- ○ O_2

7 - Reduction in carbon dioxide emissions is a suggested strategy to control global warming.

- ○ False
- ◉ True

(#6A)

8 - The depletion of stratospheric ozone is caused by:

- ○ Natural sources only
- ○ Human-made sources only
- ◉ Both natural and human-made sources
- ○ None of the above

9 - The pH value for a solution of sodium hydroxide (a basic solution) should be:

- ◉ Above 7.0
- ○ Below 7.0
- ○ Equal to 7.0
- ○ Equal to 1.5

10 - The production of acid rain is due to the reactions of ozone and nitrogen present in the atmosphere.

- ○ True
- ◉ False

☑ **I am ready to submit my answers**

eConcordia

09:52 Exam #6B

Back to My eConcordia

1 - Weakly acidic nature of rain is due to dissolved:

- (•) CO_2 (g)
- ( ) O_2 (g)
- ( ) O_3 (g)
- ( ) N_2 (g)

2 - Which of the following compound reacts with an acid in the rain to generate carbon dioxide gas?

- ( ) H_2O
- (•) $CaCO_3$
- ( ) $NaC\ell$
- ( ) NH_3

3 - The pH of a solution is measured to be 10.5. The solution is:

- ( ) Acidic
- (•) Basic
- ( ) Neutral
- ( ) None of the above

4 - The solubility of aluminum at a pH of 9.5 is higher than at a pH of 4.2.

- (•) False
- ( ) True

5 - Hydroelectric is an example of a:

- ( ) Fossil energy source
- (•) Non-fossil energy source
- ( ) No energy source
- ( ) Solar energy source

6 - The gas responsible for global warming is:

- ( ) CO
- ( ) N_2
- ( ) O_2
- (•) None of the above

7 - Using non-fossil energy sources is a suggested way to control global warming.

- (•) True
- ( ) False

(#6B)

8 - The agreement to reduce and ultimately ban the manufacture and use of CFCs goes by the name of:

- ○ Kyoto Protocol
- ○ EC Free Trade Agreement
- ○ Geneva Convention
- ◉ Montreal Protocol

9 - The pH value for a solution of ammonium chloride (an acidic solution) should be:

- ○ Above 7.0
- ◉ Below 7.0
- ○ Equal to 7.0
- ○ None of the above

10 - The welders are at a risk of being exposed to ozone in their profession.

- ◉ True
- ○ False

☑ **I am ready to submit my answers**

eConcordia

09:56 Exam #6C

Back to My eConcordia

1 - The production of acid rain is due to the reactions of:

- ○ N_2
- ◉ NO_x and SO_x
- ○ CO
- ○ O_3

2 - The reaction of calcium carbonate with sulfuric acid generates gaseous:

- ○ CO
- ◉ CO_2
- ○ O_2
- ○ O_3

3 - The pH of a solution is measured to be 7.0. The solution is:

- ○ Acidic
- ○ Basic
- ◉ Neutral
- ○ None of the above

4 - The solubility of lead at a pH of 9.5 is higher than at a pH of 4.2.

- ○ True
- ◉ False

5 - Nuclear energy is an example of a:

- ○ Fossil energy source
- ○ No energy source
- ○ Wind energy source
- ◉ None of the above

6 - One of the gases responsible for global warming is:

- ○ CO
- ○ N_2
- ○ O_2
- ◉ CO_2

7 - Energy conservation is one of the suggested ways to control global warming.

- ○ False
- ◉ True

(#6C)

8 - In the stratosphere, oxygen and ozone interact with solar energy to form a:

- (•) Dynamic system
- ( ) Static system
- ( ) Solar system
- ( ) No system

9 - The pH value for a solution of sodium chloride (a neutral solution) should be:

- ( ) Above 7.0
- ( ) Below 7.0
- (•) Equal to 7.0
- ( ) Equal to 11.5

10 - Interaction of high intensity UV light with atmospheric oxygen leads to the formation of ozone.

- ( ) False
- (•) True

☑ **I am ready to submit my answers**