تجميعات كيمياء 2016

معظم الاسئله اللي جات باختبارات الكيمياء كويز 1 وكويز 2 صح التجميع مو مرتب بس ان شاءالله تستفيدوا

💜🙂 .

Please choose the BEST answer from the given option

Question:

What is the common name for $HC{\equiv}CH$?

Options:

- propyne
- ethene
- acetylene
- ethylene

CHEM 101 Quiz-2 1st Semester 2015 – 1437

Form D

24) Which statement below is true?
A) Metals gain electrons to have a positive charge. B) Metals gain electrons to have a negative charge.
C) Metals lose electrons to have a positive charge. D) Nonmetals lose electrons.

25) The ground state electron configuration of phosphorus is _____.
A) $1s^2 2s^2 2p^4 3p^6 3d^1$ C) $1s^2 2s^2 2p^6 3s^2 3p^3$
B) $1s^2 2s^2 2p^6 3s^4 3p^1$ D) $1s^2 2s^2 2p^6 3s^2 2d^3$

26) 57.7 g Ni contains how many atoms?
A) 6.13×10^{23} atoms C) 3.47×10^{23} atoms
B) 5.92×10^{23} atoms D) 1.24×10^{24} atoms

27) Which of the following two atoms are isotopes?
A) $^{40}_{18}Ar$ and $^{40}_{20}Ca$ C) $^{12}_{6}C$ and $^{13}_{6}C$
B) $^{35}_{17}Cl$ and $^{80}_{35}Br$ D) $^{24}_{12}Mg$ and $^{12}_{6}C$

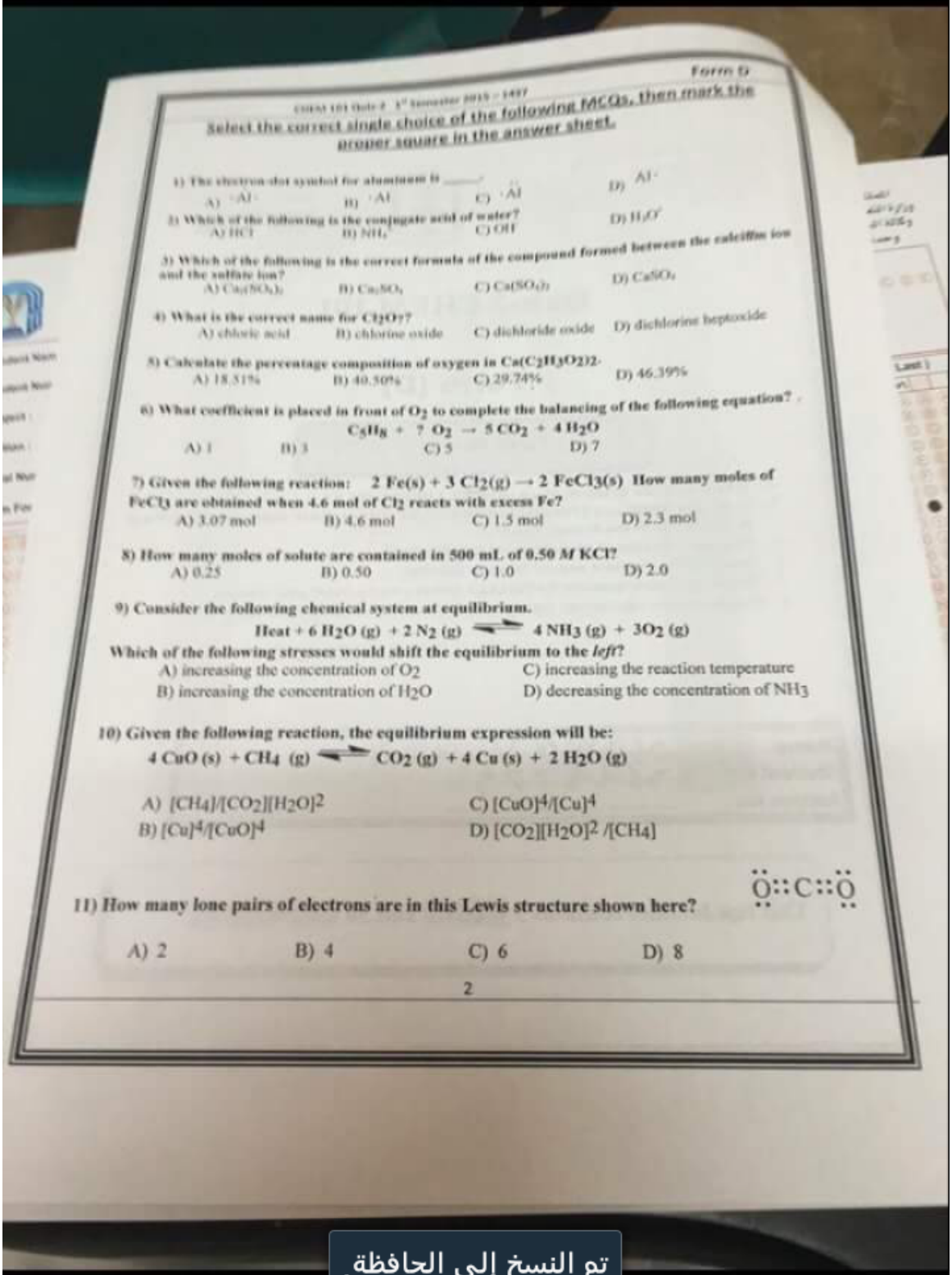
28) Which is <u>not</u> an ionic compound?
A) KCl B) $Ca(NO_3)_2$ C) SO_3 D) $AlBr_3$

29) Covalent bond formed .....
A) when an electrically positive species interacts with an electrically negative species
B) when two nonmetallic elements interact to form a compound
C) when two electrically negative species interact
D) when two electrically positive species interact

30) A bond where the electrons are shared unequally is called _____.
A) polar covalent B) metallic C) nonpolar covalent D) ionic

Good Luck

١٢/١٦/٢٠١٥



Form B

Select the correct single choice of the following MCQs, then mark the proper square in the answer sheet.

1) The electron-dot symbol for aluminum is _____.
A) ·Al· B) ·Al C) ·Al D) Al·

2) Which of the following is the conjugate acid of water?
A) HCl B) NH_4^+ C) OH^- D) H_3O^+

3) Which of the following is the correct formula of the compound formed between the calcium ion and the sulfate ion?
A) $Ca_2(SO_4)_3$ B) Ca_2SO_4 C) $Ca(SO_4)_2$ D) $CaSO_4$

4) What is the correct name for Cl_2O?
A) chloric acid B) chlorine oxide C) dichloride oxide D) dichlorine heptoxide

5) Calculate the percentage composition of oxygen in $Ca(C_2H_3O_2)_2$.
A) 18.51% B) 40.50% C) 29.74% D) 46.39%

6) What coefficient is placed in front of O_2 to complete the balancing of the following equation?

$$C_5H_8 + ?\ O_2 \rightarrow 5\ CO_2 + 4\ H_2O$$

A) 1 B) 3 C) 5 D) 7

7) Given the following reaction: $2\ Fe(s) + 3\ Cl_2(g) \rightarrow 2\ FeCl_3(s)$ How many moles of $FeCl_3$ are obtained when 4.6 mol of Cl_2 reacts with excess Fe?
A) 3.07 mol B) 4.6 mol C) 1.5 mol D) 2.3 mol

8) How many moles of solute are contained in 500 mL of 0.50 *M* KCl?
A) 0.25 B) 0.50 C) 1.0 D) 2.0

9) Consider the following chemical system at equilibrium.

$$Heat + 6\ H_2O\ (g) + 2\ N_2\ (g) \rightleftharpoons 4\ NH_3\ (g) + 3O_2\ (g)$$

Which of the following stresses would shift the equilibrium to the *left*?
A) increasing the concentration of O_2
B) increasing the concentration of H_2O
C) increasing the reaction temperature
D) decreasing the concentration of NH_3

10) Given the following reaction, the equilibrium expression will be:

$$4\ CuO\ (s) + CH_4\ (g) \rightleftharpoons CO_2\ (g) + 4\ Cu\ (s) + 2\ H_2O\ (g)$$

A) $[CH_4]/[CO_2][H_2O]^2$
B) $[Cu]^4/[CuO]^4$
C) $[CuO]^4/[Cu]^4$
D) $[CO_2][H_2O]^2/[CH_4]$

11) How many lone pairs of electrons are in this Lewis structure shown here?

A) 2 B) 4 C) 6 D) 8

2

١٢/١٦/٢٠١٥

CHEM 101 Quiz-2 1st Semester 2015 – 1437 Form D

12) A Bronsted-Lowry acid is defined as a substance that _____.
A) increases the $[H^+]$ concentration when placed in water
B) decreases the $[H^+]$ concentration when placed in water
C) acts as a proton donor
D) acts as a proton acceptor

13) Which of the following is a weak acid?
A) HF B) H_2SO_4 C) HBr D) HNO_3

14) What is the $[H_3O^+]$ in a solution with $[OH^-] = 1.0 \times 10^{-12}$ M?
A) 1.0×10^{-12} M
B) 1.0×10^{-8} M
C) 1.0×10^{2} M
D) 1.0×10^{-2} M

15) The empirical formula of a compound is CH_2, and its molar mass is about 42.g. What is its molecular formula?
A) CH_2 B) C_2H_4 C) C_3H_6 D) C_4H_8

16) What is the mass in gram of NaCl solution in a 0.500 L bottle of 2.00 *M* NaCl?
A) 29.3 g B) 58.5 g C) 117 g D) 234 g

17) The substance NaOH in water solution is a:
A) nonelectrolyte B) weak electrolyte C) weak base D) strong electrolyte

18) In the balanced redox reaction: $2\ C_2H_6(g) + 7\ O_2(g) \rightarrow 4\ CO_2(g) + 6\ H_2O(g)$, which species is reduced?
A) $C_2H_6(g)$ B) $O_2(g)$ C) $CO_2(g)$ D) $H_2O(g)$

19) When an acid reacts with a base, the reaction is called which of the following?
A) neutralization B) precipitation C) redox D) single displacement

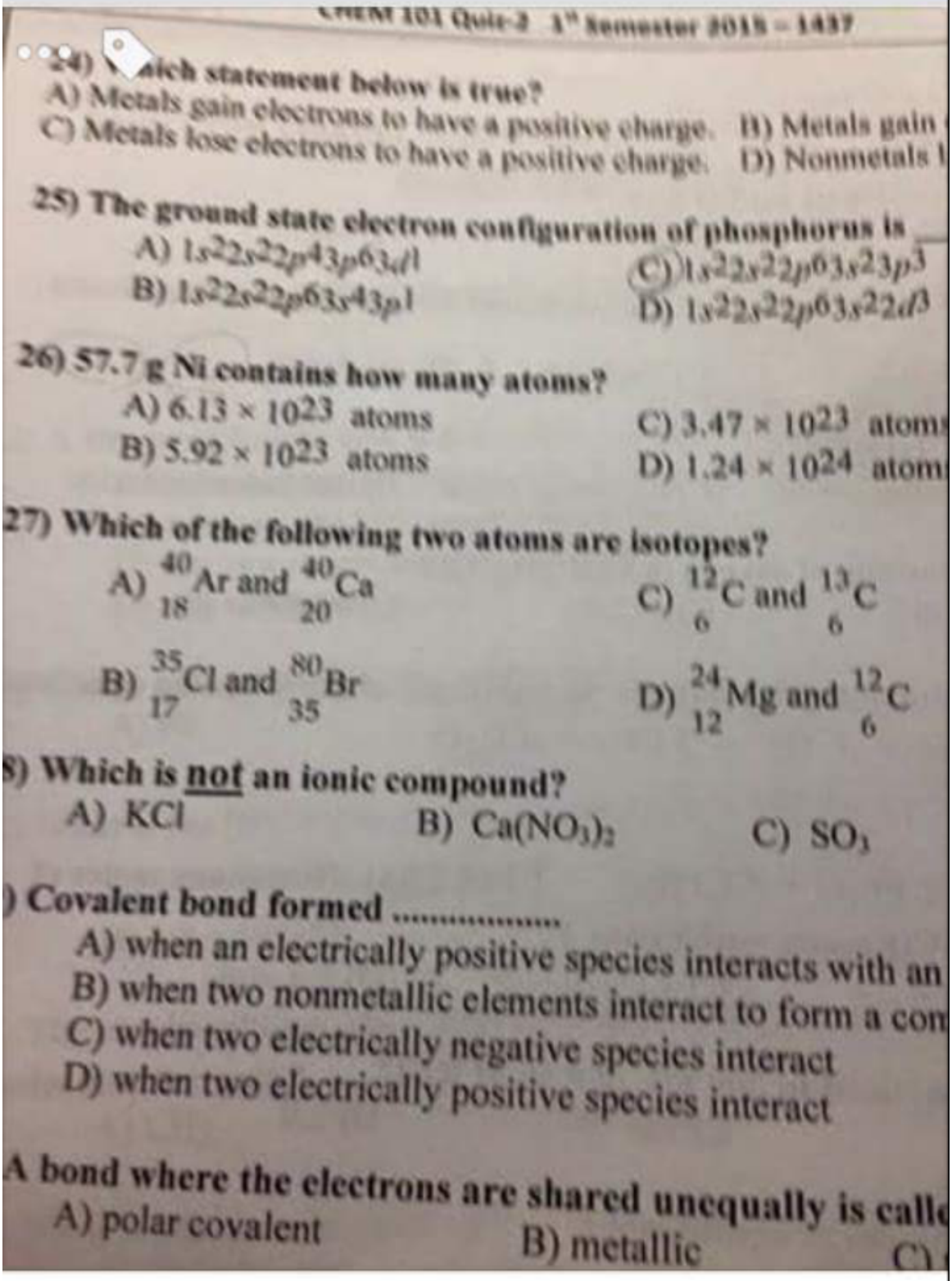
20) Under which of the following conditions is the A-B bond considered to be ionic?
A) when A and B have the same electronegativity
B) when the electronegativity difference between the two atoms is 1.0
C) when the electronegativity difference between the two atoms is 1.5
D) when the electronegativity difference between the two atoms is >> 2.0

21) Which element is <u>not</u> an alkali metal?
A) Li B) K C) Rb D) Kr

22) Which element has the smallest ionization energy?
A) K B) Ga C) Br D) Ca

23) How many neutrons are in the isotope $^{238}_{92}U$?
A) 238 B) 146 C) 92 D) 330

١٢/١٦/٢٠١٥



CHEM 101 Quiz-2 1st Semester 2015 – 1437

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A) polar covalent
B) metallic
C)

جاري حفظ لقطة الشاشة...

21) Which element is not an alkali metal?

تعليق | أعجبني

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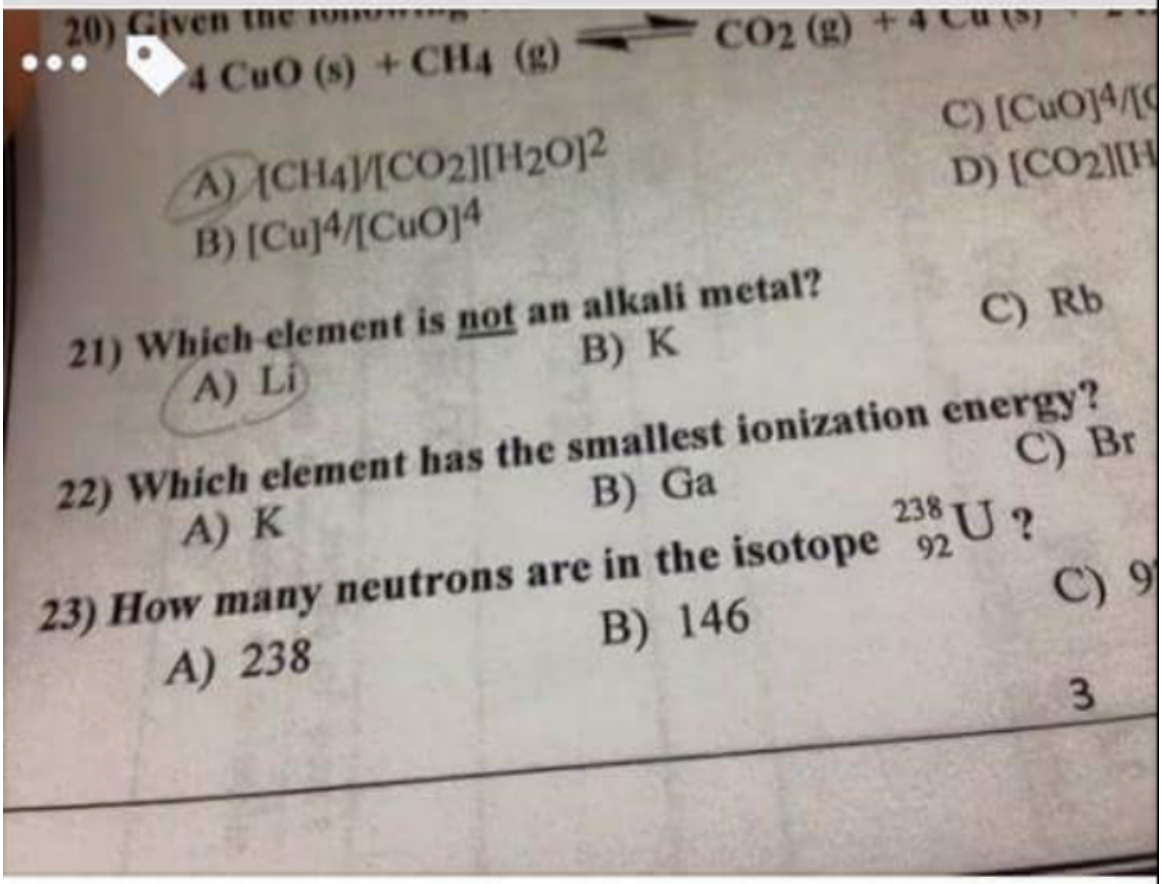

تعليق | أعجبني

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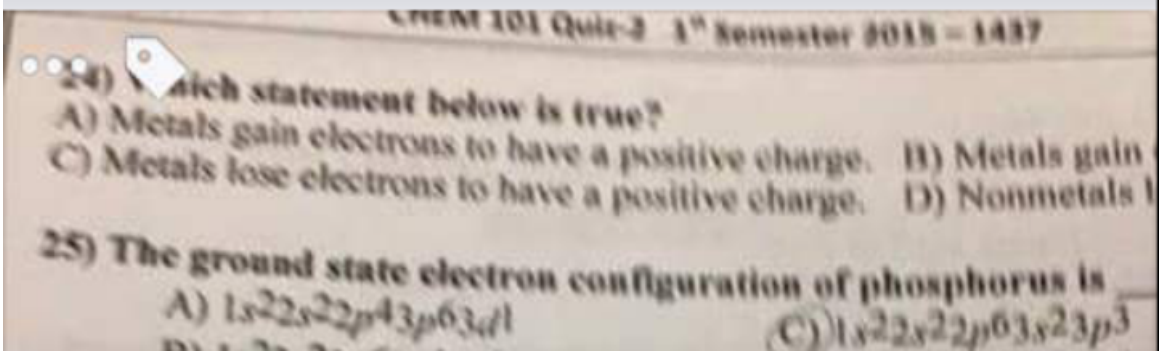

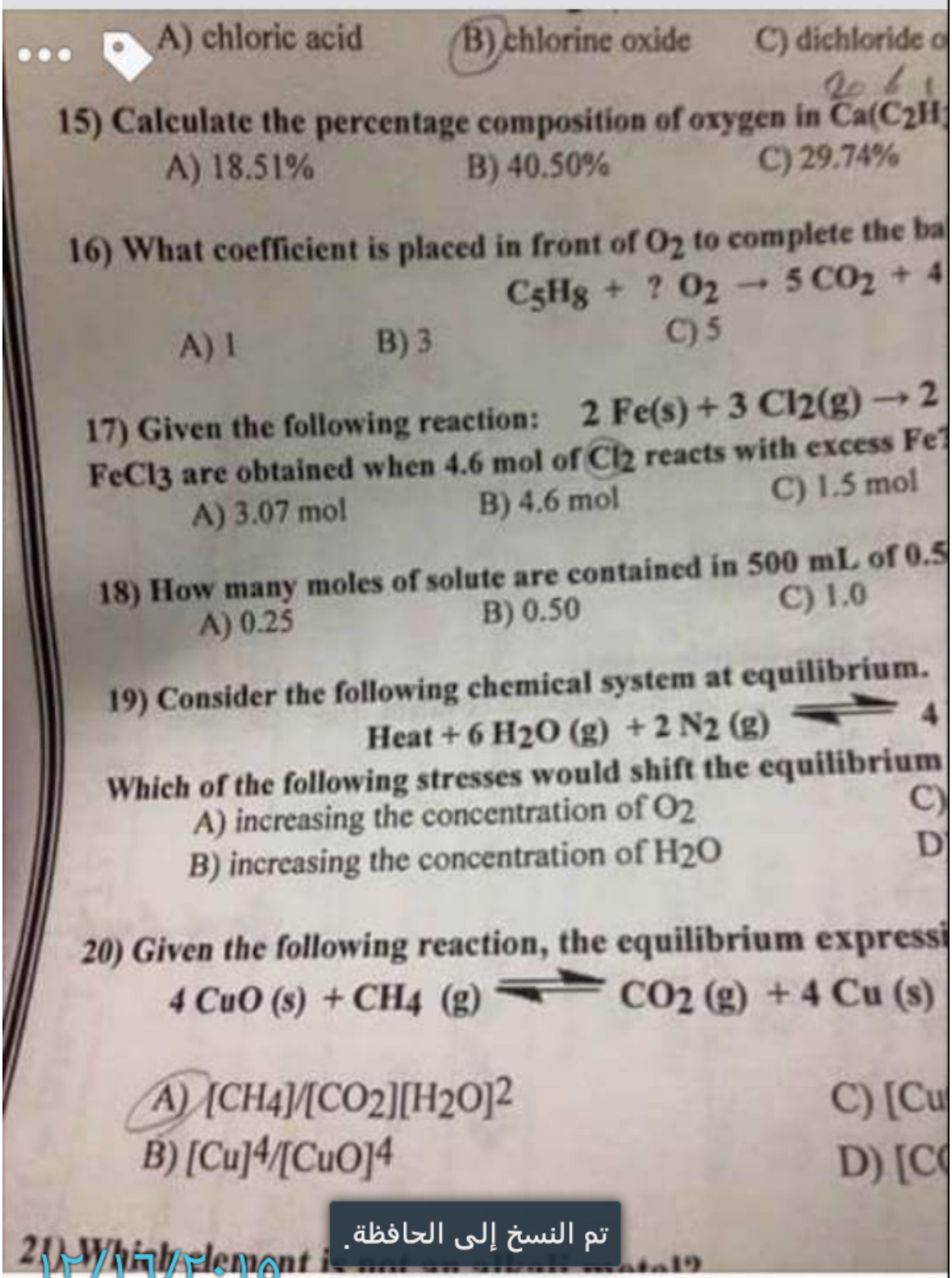

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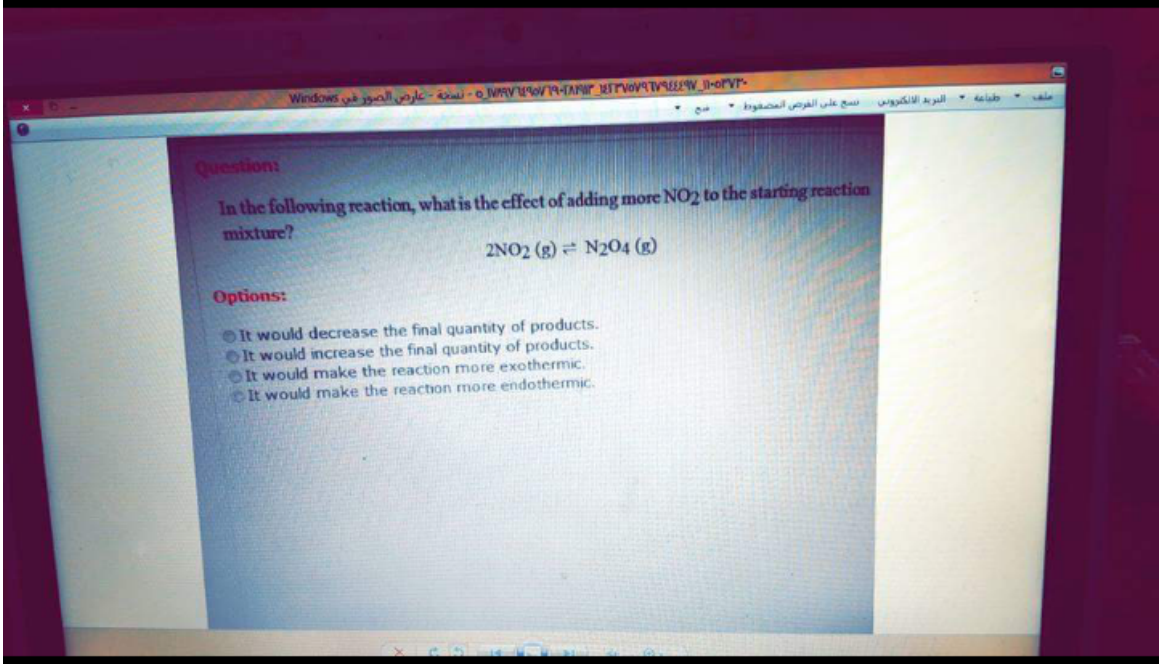
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بسح
بسح على القرص المضغوط
البريد الالكتروني
طباعة
ملف
Question:
In the following reaction, what is the effect of adding more NO_2 to the starting reaction mixture?
$2NO_2\ (g) \rightleftharpoons N_2O_4\ (g)$
Options:
It would decrease the final quantity of products.
It would increase the final quantity of products.
It would make the reaction more exothermic.
It would make the reaction more endothermic.

١٢/١٦/٢٠١٥

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١٢/١٦/٢٠١٥

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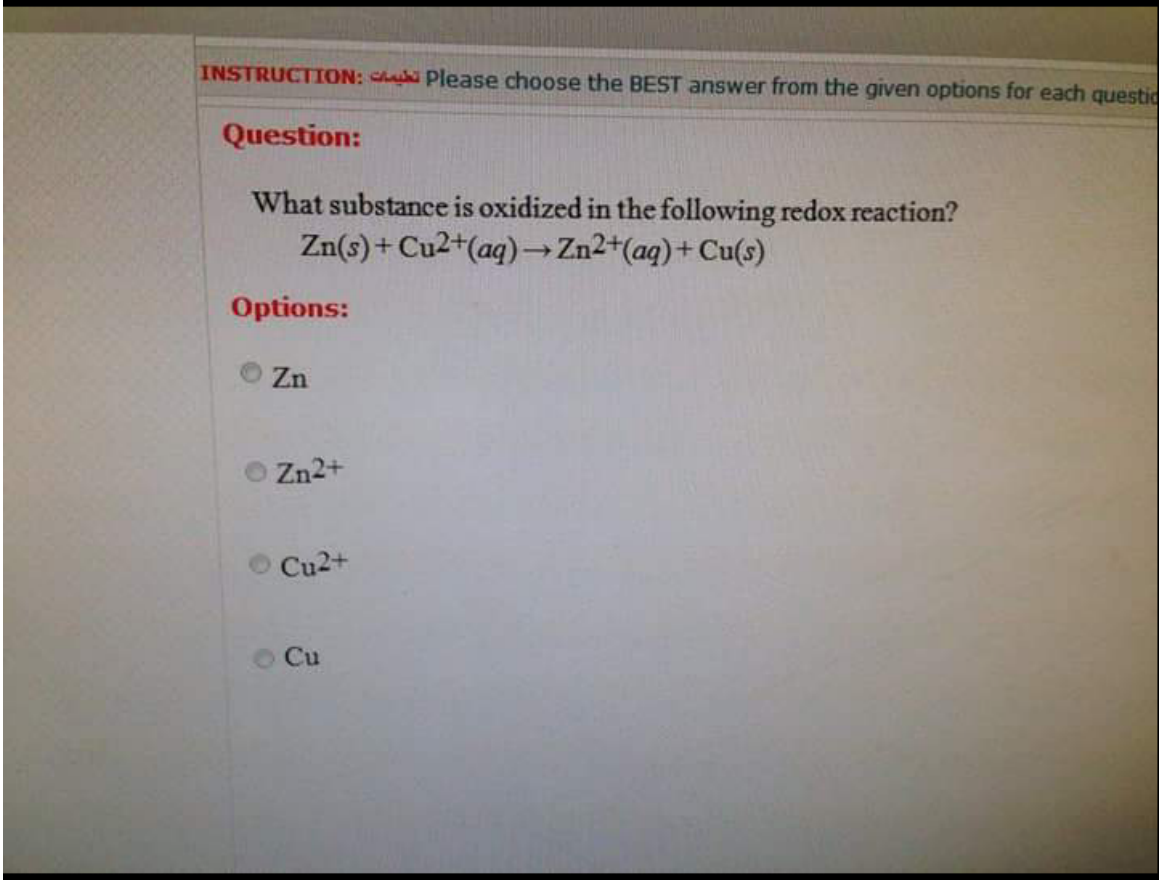

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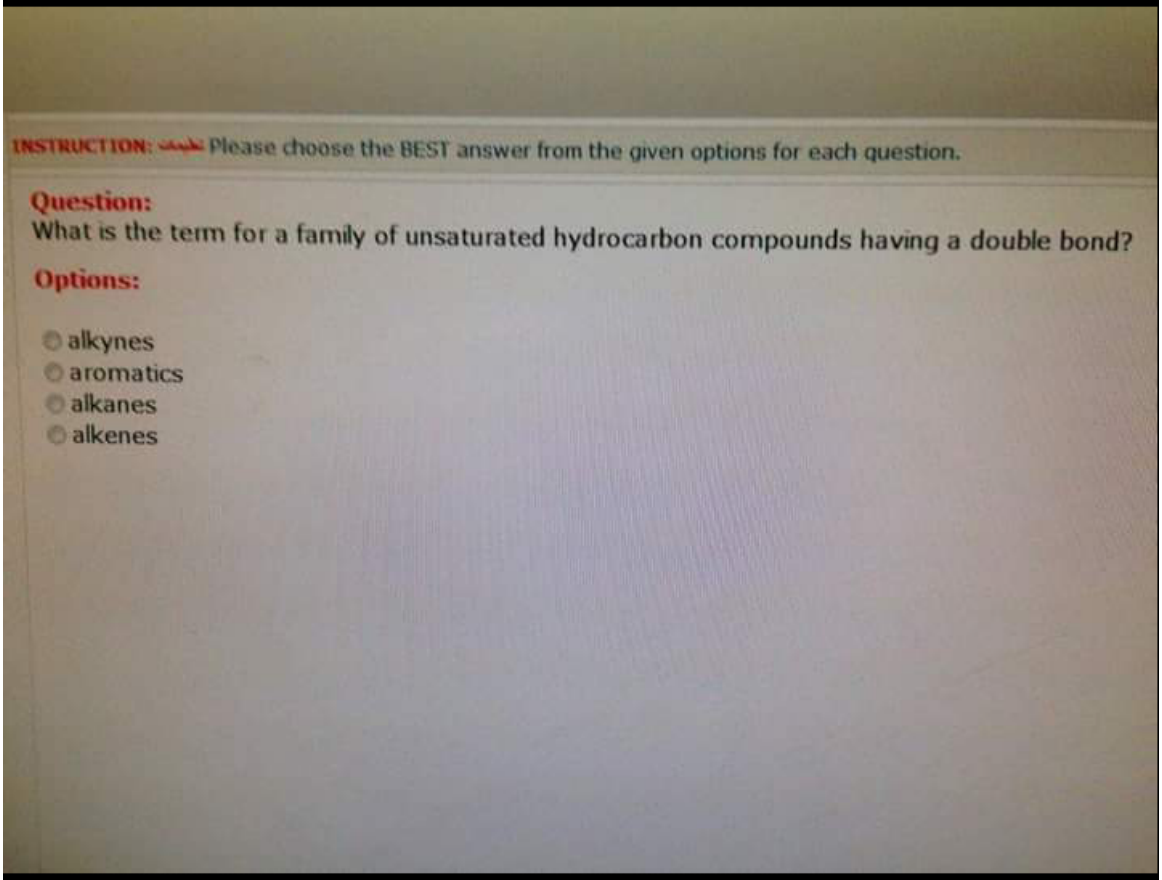


تم النسخ إلى الحافظة.

١٢/١٦/٢٠١٥

Question:
The systematic name for the chemical compound RbCl is:

Options:

- rubidium monochloride
- rubidium(I) chloride
- rubidium(II) chloride
- rubidium chloride

١٢/١٦/٢٠١٥

Question:

The molar mass of H_2SO_4 is equal to:

Options:

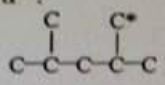
- 108 g/mol
- 98 g/mol
- 88 g/mol
- 77 g/mol

١٢/١٦/٢٠١٥

INSTRUCTION: تعليمات Please choose the BEST answer from the given options for each question.

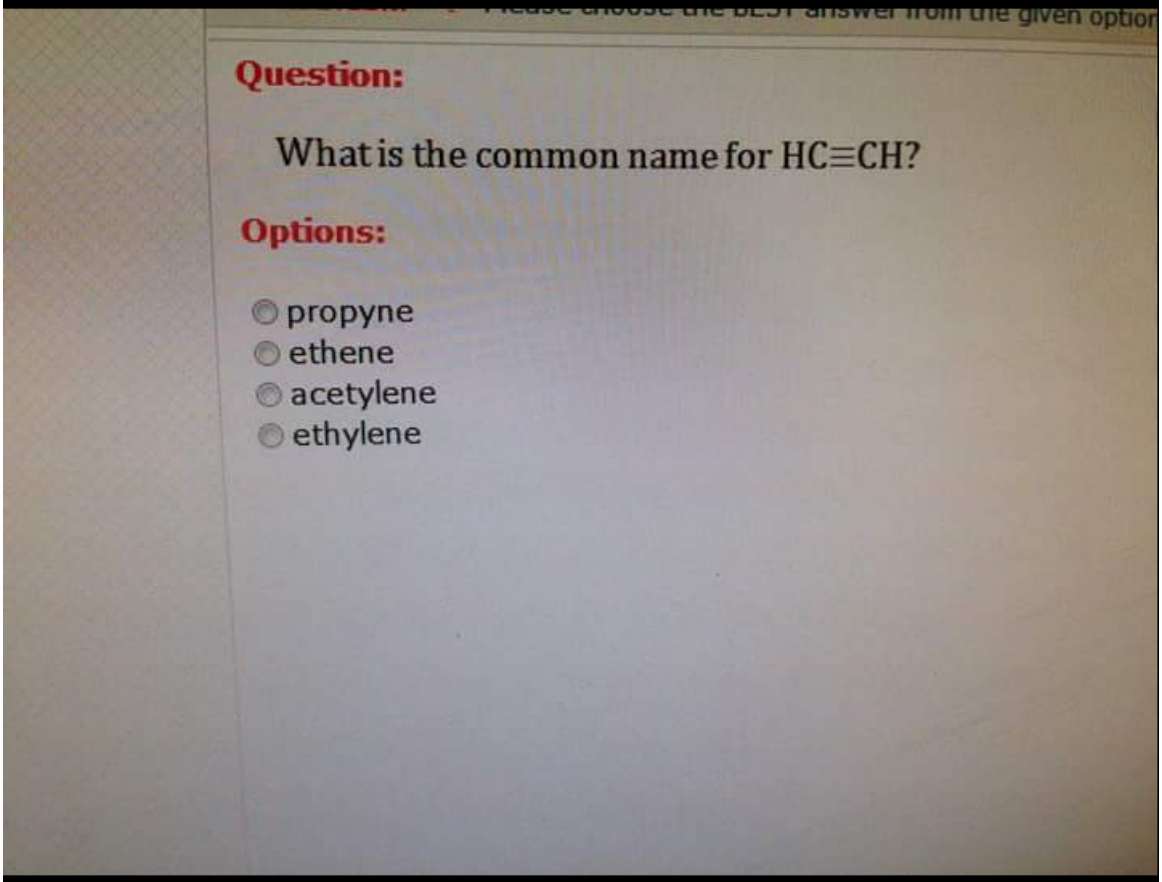
Question:

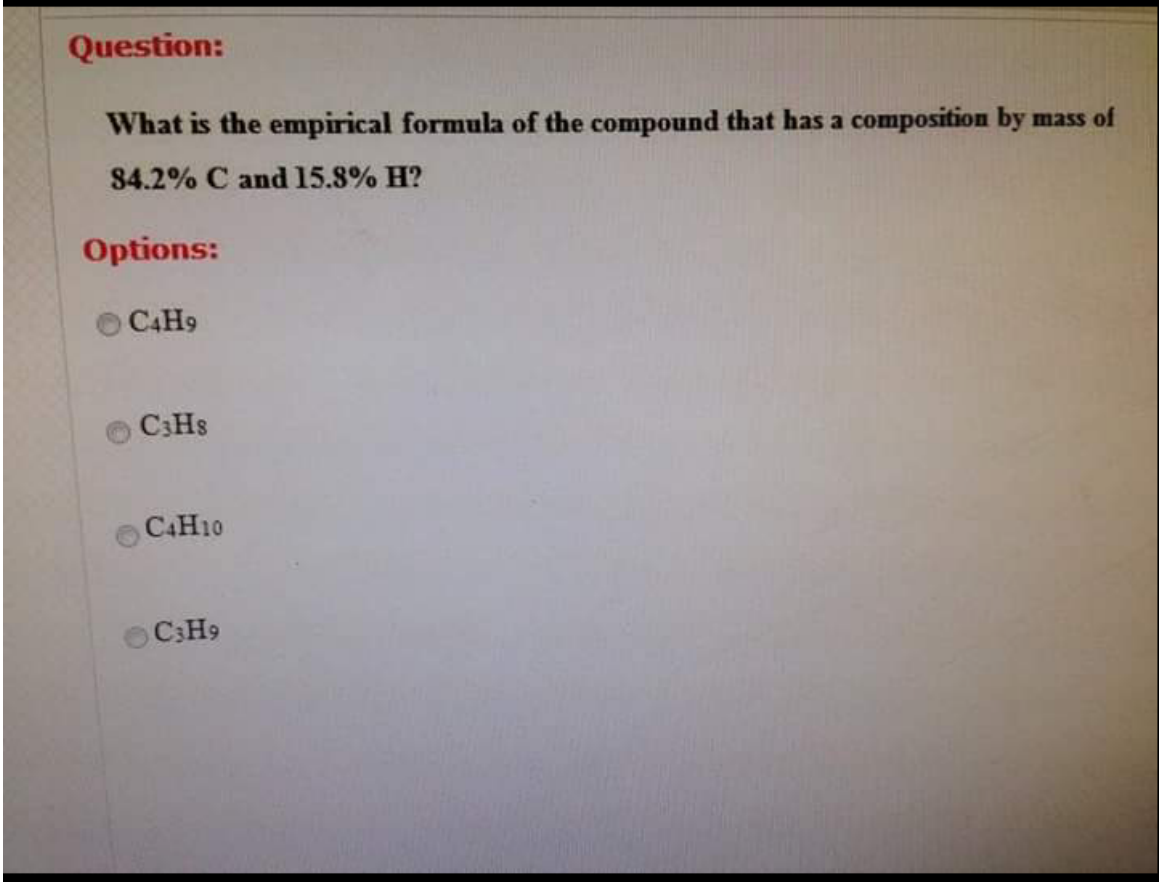
The carbon skeleton of an alkane is shown below. How many hydrogen atoms are bonded to the carbon marked with a *?



Options:

- 3
- 2
- 0
- 1





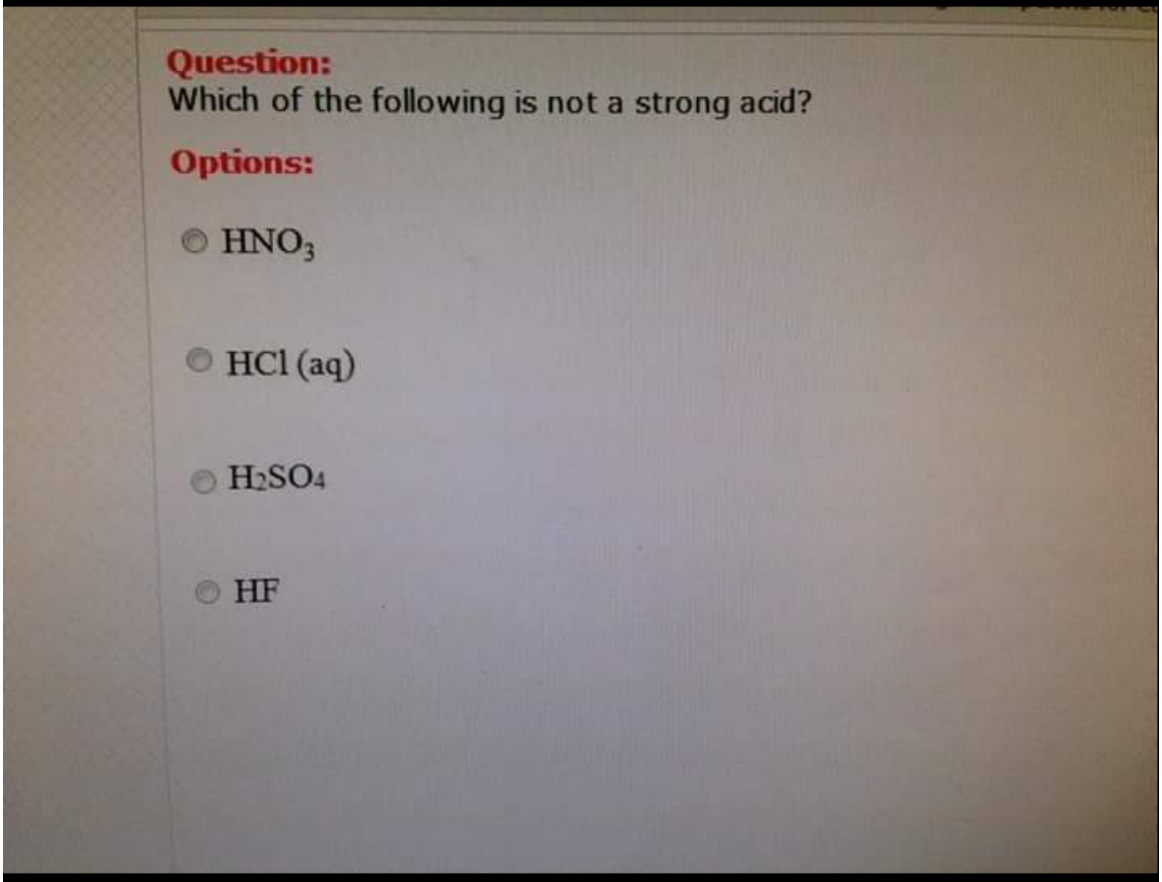
Question:

What is the empirical formula of the compound that has a composition by mass of 84.2% C and 15.8% H?

Options:

- C_4H_9
- C_3H_8
- C_4H_{10}
- C_3H_9

١٢/١٦/٢٠١٥



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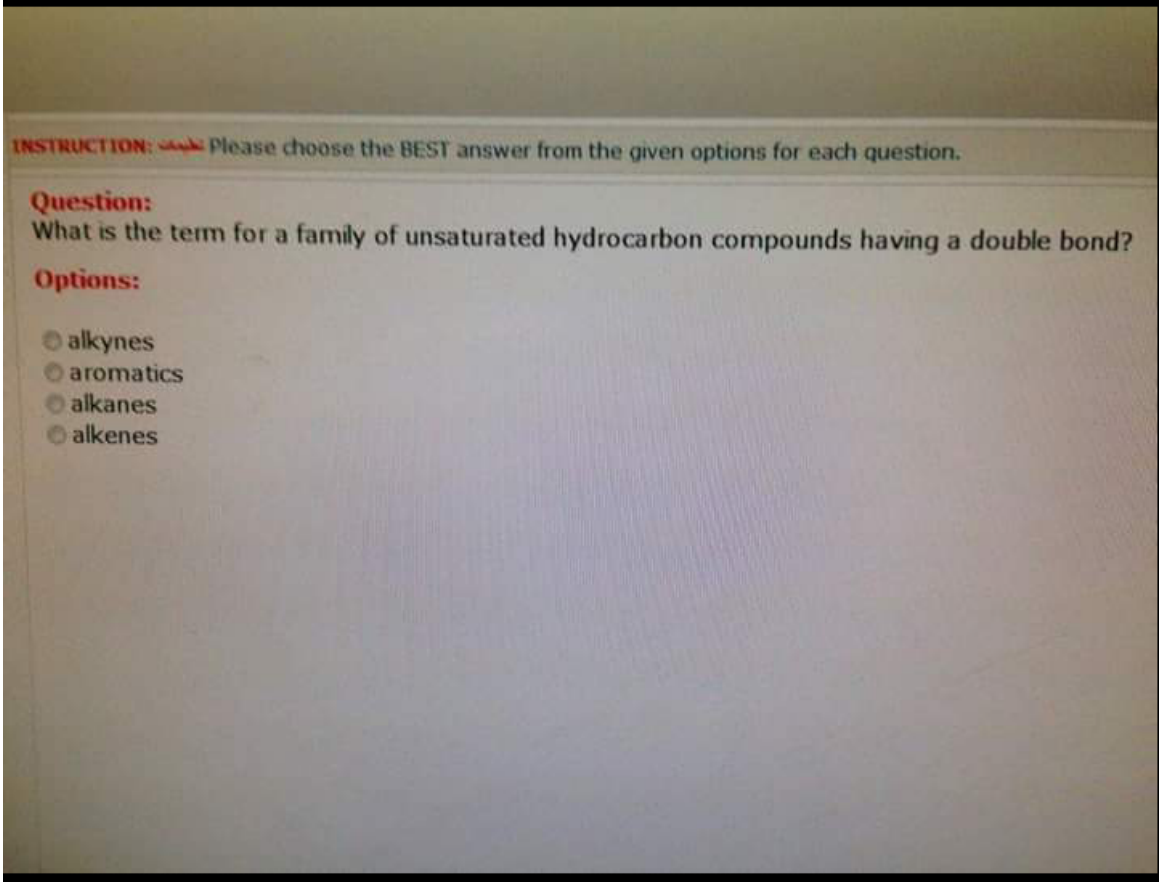

تم النسخ إلى الحافظة.

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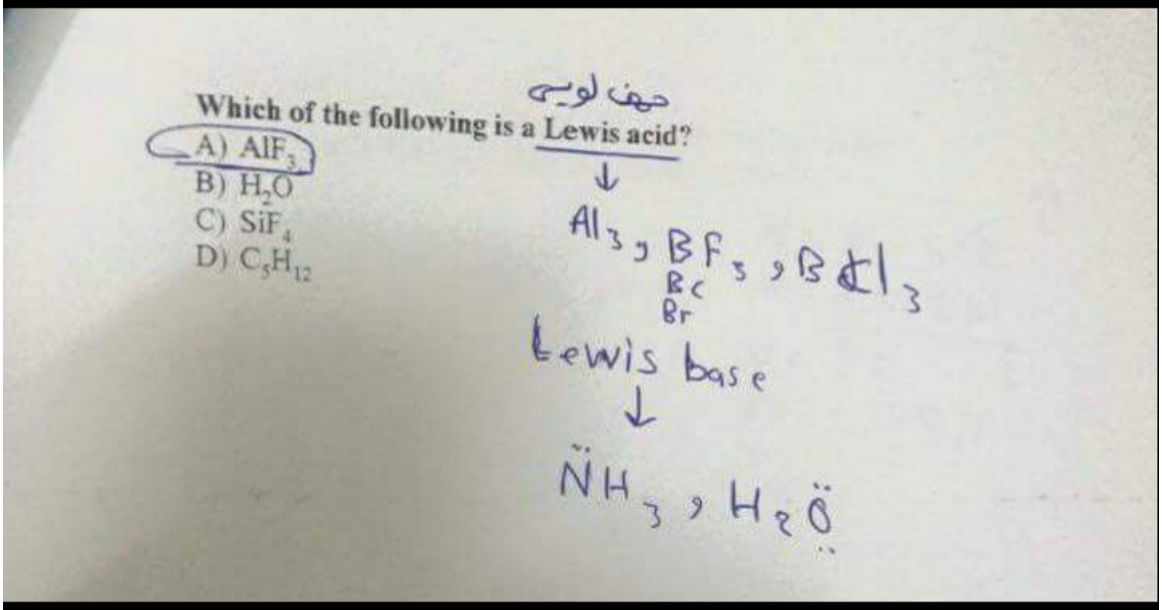
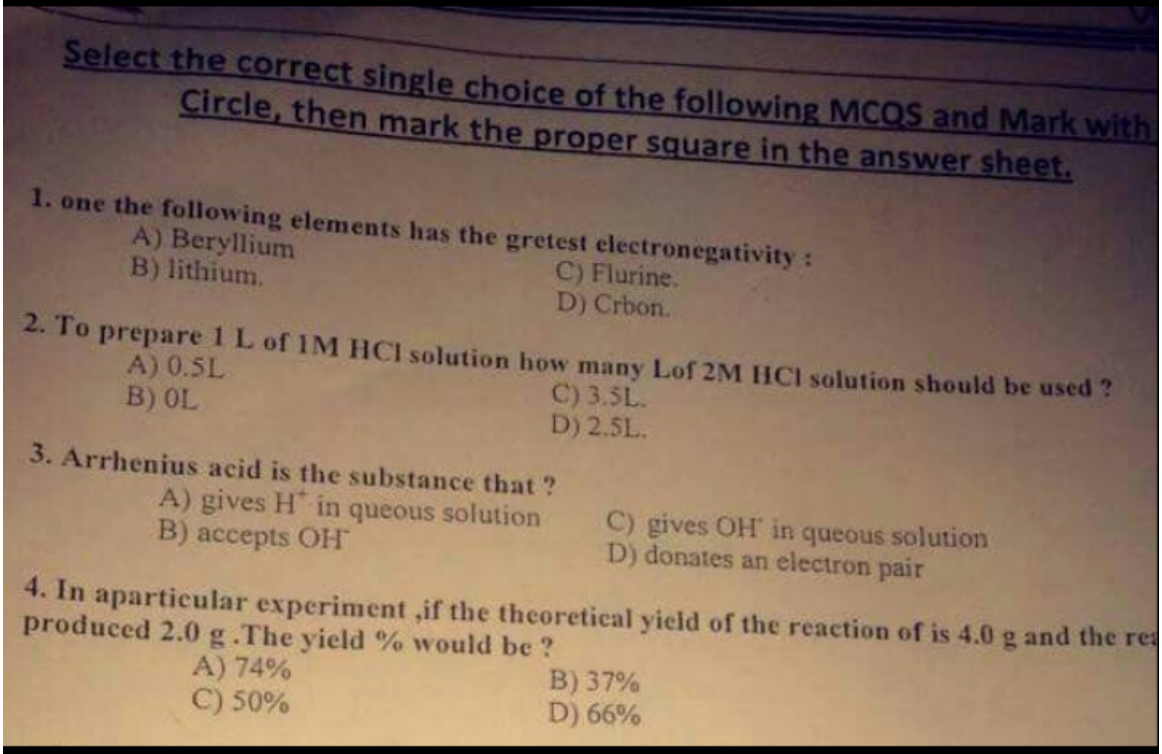




Select the correct single choice of the following MCQS and Mark with Circle, then mark the proper square in the answer sheet.

1. one the following elements has the gretest electronegativity :
   A) Beryllium
   B) lithium.
   C) Flurine.
   D) Crbon.

2. To prepare 1 L of 1M HCl solution how many Lof 2M HCl solution should be used ?
   A) 0.5L
   B) 0L
   C) 3.5L.
   D) 2.5L.

3. Arrhenius acid is the substance that ?
   A) gives H^+ in queous solution
   B) accepts OH^-
   C) gives OH^- in queous solution
   D) donates an electron pair

4. In aparticular experiment ,if the theoretical yield of the reaction of is 4.0 g and the re produced 2.0 g .The yield % would be ?
   A) 74%
   B) 37%
   C) 50%
   D) 66%

١٢/١٦/٢٠١٥

5. The oxidation number of chlorine in HCl is ?

A) -1
B) -3
C) +2
D) +1

6. In the reaction $4Fe + O_2 \rightarrow 2Fe_2O_{3(S)}$,which species is oxidized ?

A Fe.
B) O_2.
C) Fe^{+3}.
D O^{-2}.

7. Consider the following chemaical equation : $NH_4^+ + OH^- \leftrightarrow H_2O + NH_3$,which th statement is correct ?

A) NH_4^+ is an acid and NH_3 is conjugate base
B) NH_4^+ is an acid and OH^- is conjugate base
C) OH^- is an acid and H_2O is conjugate base
D) NH_3 is base and H_2O is conjugate acid

. The molar mass of $Ca(OH)_2$?

A) 70g/mol
B) 78g/mol
C) 68g/mol
D) 74g/mol

. Solution A is 2 mol in 1 L, solution B is 3mol in 1L.Which solution has ahigher r

A) Solution A.
B) Solution B.
C) the molarity of the solution cannot be calcu
D) both solutions have equal concentration .

). For the following reacting ,calculate the mass in gram of the product Al2O3 f 6 g of oxygen is consumed $4Al + 3O_2 \rightarrow 2Al_2O_3$? (Al =27 ,O =16)

A) 0.5g .
B) 1.1g .
C) 3.4g
D) 6.8g.

١٢/١٦/٢٠١٥

Question:

How many moles of CO_2 could be produced when 5 moles of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

Options:

- 10 mol
- 4 mol
- 6 mol
- 8 mol

Question:

Which of the following is not a strong acid?

Options:

- HNO_3
- $HCl\ (aq)$
- H_2SO_4
- HF

4 اي من التالي له electronegativrirg اقل وجابوا الهالوجينات والإجابة كانت Iodine

5 اي من التالي له electron affinity أقل

1 C 2 N 3 O 4 B

6 اي من التالي غير صحيح عند تقليل التركيز

الإجابة ان عدد المولات لا يتغير

7 اي من التالي Strong electrolyte

والإجابات كلها مركبات تساهمية ما عدا LiCl وهي الإجابة

8 تسمية CuO

9 أين تقع Non-metal

The right side

وأغلب الأسئلة معادلات بسيطة جدا ما عدا معادلة وحدة كان شوي تلخبط

$$H+Cl \underset{SOON}{\Rightarrow} HCl$$

وكان معطيك عدد ذرات H ويبغى مولات HCl طبعا تحول عدد الذرات

إلى مولات بعدين تحولها إلى مولات

1 من صاحب atomic theory

John Dalton

تم النسخ إلى الحافظة.

جاني تحويل من جرام لمول

و العائد النظري

و عدد مولات اذا اضفنا 3 مول من النشادر و 4 مول من ثاني اكسيد الكربون كم هيصير المركب .....(ناسيه ايش المركب)

عدد الكترونات في الاكسجين lone pairs

معادلة التخفيف

و المولاريه تعويض مباشر

و ما هو العنصر الذي لديه اعداد اكسدة مختلفه و هوا الحديد

Hclكم lone pairفيها

الجواب 3

التوزيع الالكتروني لعنصر الفلور

لما يزيد تركيز ايون الهيدروجين ايش يصير لل ph؟ ينخفض

ايش قاعدة لويس؟ جاء بين الخيارات BF3واعتقد هي الصح

جاء اي واحد حمض؟ بين الخيارات ايون الهيدرنيوم واعتقد كمان هو الصح

اختبار الدوري الاول كيمياء :

- تعريف الرابطة الأيونية
- اي من الآتي أيون موجب :

Sulfate ion , carbonate ion , hydrogen ion , ammonium ion

- استنادا على قاعدة باولي أقصى عدد من الإلكترونات في كل : orbitalاثنين
- تطلعي ال empirical formula

C , 10.4% H , 27.5 % O 62%

- حولي من كيلو جرام الى باوند
- سؤال عن الكثافة ، تطلع الحجم

- حولي من كيلو جرام الى باوند
- سؤال عن الكثافة ، تطلع الحجم
- اذا نزلنا من فوق الى تحت في الجدول الدوري ايش يصير في ionization energy و radius
- تعريف المعادلة الموزونة
- عدد إلكترونات - : ٣٦br
- اي من العناصر الاتيه metal
- تحويل من Cالى F
- يعطيكي الكتلة ويبغى عدد الجزئيات : اول شيء التحويل الى مول و بعدين الضرب في عدد افوجادرو
- which one of the following is pure substance : diamond
- تسمية المركب P3O5

وايش شحنه الالكترون اللي هو نيقتيف

اقولكم جاني سؤال هاتي امبركل فورملا للمركب c4H20و
حطيت c2H10ها صح ولا طمنوني

و الاعلى الكهروسالبيه من بين العناصر و تختاري العنصر الاكثر سالبيه

وكمان حمض لويس

و كمان نصف قطر الذره

و العالم صاحب قطرة الزيت

و كمان عدد الالكترونات و البروتونات و النيترونات

ووزن معادله لعنصر الاكسجين فقط

العناصر الانتقاليه

و اين تقع اشباه الفلزات بالجدول الدوري

و اي العناصر يعتبر حمض برونستدلوري

2 اي من التالي Lewis Base عشان يلخبطونك
جابوا NH4 و NH3 والإجابة طبعا 3

3 اي من التالي molecular element وهي السبعة عناصر كان الوحيد منها الهيدروجين فالأجوبة

Jody Al Har

atomic element

هيدوجين

نيتروجين

بروبين

ايودين ...

Question:

What is the empirical formula of the compound that has a composition by mass of 84.2% C and 15.8% H?

Options:

- C_4H_9
- C_3H_8
- C_4H_{10}
- C_3H_9

Question:

The molar mass of H_2SO_4 is equal to:

Options:

- 108 g/mol
- 98 g/mol
- 88 g/mol
- 77 g/mol

موقع النن ميتل بالجدول
جاب c-14 كم عدد النيترونات
احول من متر الى انش
احول من فهرنيات الى سيليوز
الصوديوم كم شحنته
كم عدد الذرات في واحد مول
ايت واحد مادة نقيه الثلج ولا ماء البحر و berss والهواء
ايت واحد رمز العنصر مو صح حيكون البوتاسيوم
سم العنصر يود2 فلور 6
ايت واحد اسمه Co?2 صح كوبر (II) ...نسيت
سوال ايت واحد الكلور اكبر منه الخيارات

مسائل الفصل الثالث جاني على حل حاجه
الصيغه الجزئيه والبريتكال ونسبة عنصر من
مركب كل حاجه والتسميات تقريبا جاء على كل
حاجه

CuCl2

حيسير11)Cloroeoid(cabor
حولي من -١٩٦cالى كالفن
٧٧حاولت احفظلكم والله بس اكلت ونسيت

متجانس وغير متجانس جا عليها بس ناسيه
احسبي عدد المولات احسبي الكتله المواليه جا
يقولك شحنه الاكسجين (-٢)
عنصر التكافؤ حقو نا١
انا ماجاني علماء بس صحبتي جاها جا
لصحبتي مسأله من شابتر ون فيها طرح وكذا
جاني يقولي اوجدي الكتله ومعطيني الحجم
والكثافه
وبس هذا اللي اتذكر ربنا يوفقكم

١٩ مارس، ٢٠١٥ ١٠:٠٤ ص

تحت. ال٢صغيره s6Br2
sulphar hexa browid
وال٣صفيره ال٢)يقو)يقول شحنة)Fe2O3
حيكون موجب ثلاثه??=Fe
ماده نقيه جاني اثنين مرا غلط وواحد الالكاس
وشي سويتر اخترت الالماس
وجاني يقولك عنصر يرتبط بشجنه او امثر اللي
هوا انا اخترت Fe وزن المعادله جاني شي مرا
تافهه وسهل Al+O3-------AlO2 يقولك ايش
نحط قبل الAlO2
الكلور اكبر من فلور برون ايود
مسائل الفصل التالت جاني على كل حاجه
الصيغه الجزئيه والبريتكال ونسبة عنصر من
مركب كل حاجه والتسميات تقريبا جاء على كل
حاجه

CuCl2

حيسير11)Cloroeoid(cabor
حولي من -١٩٦cالى كالفن
٧٧حاولت احفظلكم والله بس اكلت ونسيت



☆جاني سؤال يطلب weak acid

الي هو CH3COOH vinegar (خل) .

☆وجا سؤال اقوى حمض ويكون H3O.

☆سؤال يبغى عدد المولات ومديني عدد جزيئات احولها لمولات واجيب عدد المولات.

15- The atomic number of an element is

1) The number of protons in an atom
2) Equal to the positive charge of an atom's nucleus
3) Equal to the number of electrons in a neutral atom
4) All of the above are valid definition

[redacted]

20- A d sublevel can hold a maximum of

1) 2 electrons
2) 6 electrons
3) 10 electrons
4) 14 electrons

☆M1V1=M2V2 المطللوب >V2 .

☆Keq اعطاني معادله ويبغى

☆اربع عناصر من مجموعه 2A ويبغى اعلى واحد في electronaffinities.

☆صيغه ويبغى empirical formulas

☆اعطاني معادله ويبغى الوزن

☆ A+B+heat>>C+D.

ويبغى يروح لليسار

-ينقص تركيز مادة من النواتج نسيت المادة .

-زيادة حرارة

-زيادة تركيز وحده من المتفاعلات .

-نسيت الاخير(:

☆ مسئله يبغى percent yield.

☆كم long pere في O

☆K>>1 is favored

الاجابه Forward reaction ص127

☆حمض

☆يبغى سترونق اسد

☆ جاب خيارات قيم ph ايت واحد حمض

☆ HCl كم long per

Question No. 24

Which of the following elements has the highest electronegativity?

- Si
- Mg
- S
- Cl

Save & Next حفظ والتالي

Question No. 23

Which molecule contains the longest carbon-carbon bond?

- $F_2C{=}CF_2$
- $HC{\equiv}CH$
- $H_3C{-}CH_3$
- $H_2C{=}CH_2$

Question No. 20

Which of the following compounds gives a non electrolyte aqueous solution?

- $CaCl_2$
- H_2CO_3
- CH_4
- H_3PO_4

Question No. 22

What is the oxidation number of sulfur in H_2SO_4?

- +6
- +2
- -2
- +4

Question No. 5

If 2 moles of an element are weighing 54 g, this element is most likely:

- Silver with a molar mass of 108.0
- Aluminum with a molar mass of 27.0
- Phosphorous with a molar mass of 31.0
- Manganese with a molar mass of 55.0

Question No. 16

How many moles of CO_2 could be produced when 3 moles of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3\ O_2 \rightarrow 2\ CO_2 + 3\ H_2O$$

- 6 mol
- 8 mol
- 2 mol
- 4 mol

Question No. 8

What coefficient is placed in front of O_2 to complete the balancing of the following equation?

$$C_5H_8 + ?\ O_2 \rightarrow 5CO_2 + 4H_2O$$

- 3
- 7
- 5
- 1

Save & Next محفظ والتالي

Question No. 16

The combustion of propane (C_3H_8) in the presence of excess oxygen yields CO_2 and H_2O:

$$C_3H_8\,(g) + 5\,O_2\,(g) \rightarrow 3CO_2\,(g) + 4\,H_2O\,(g)$$

When 2.5 mol of O_2 are consumed in their reaction, _____ mol of CO_2 are produced.

- 6
- 1.5
- 3
- 5

Question No. 9

A covalent bond is best described as

- a bond between a metal and a nonmetal.
- the transfer of electrons.
- a bond between a metal and a polyatomic ion.
- the sharing of electrons between atoms.

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 21

According to the Arrhenius concept, if $Ca(OH)_2$ were dissolved in water, it would act as

- an acid.
- an electron pair acceptor.
- a base.
- a proton acceptor.

Save & Next حفظ والتالی

Question No. 9

A covalent bond is best described as

- a bond between a metal and a nonmetal.
- the transfer of electrons.
- a bond between a metal and a polyatomic ion.
- the sharing of electrons between atoms.

Question No. 21

According to the Arrhenius concept, if KOH were dissolved in water, it would act as

- a proton acceptor.
- an acid.
- a base.
- an electron pair acceptor.

Which of the following statements about ions is INCORRECT?

- Cations always have the same number of protons as electrons.
- Cations are formed when an atom loses electrons.
- Cations are positive ions and anions are negative ions.
- Anions are formed when an atom gains electrons.

Question No. 22

Which one of the following equations describes a *redox* reaction?

- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Question No. 1

Which statement about electronegativity is incorrect?

- Within a group, electronegativity increases from bottom to top.
- Fluorine is the most electronegative atom of all the elements.
- Within a row, electronegativity increases from left to right.
- Metals generally have higher electronegativity values than nonmetals.

Question No. 7

One of the following elements exists as a diatomic molecule:

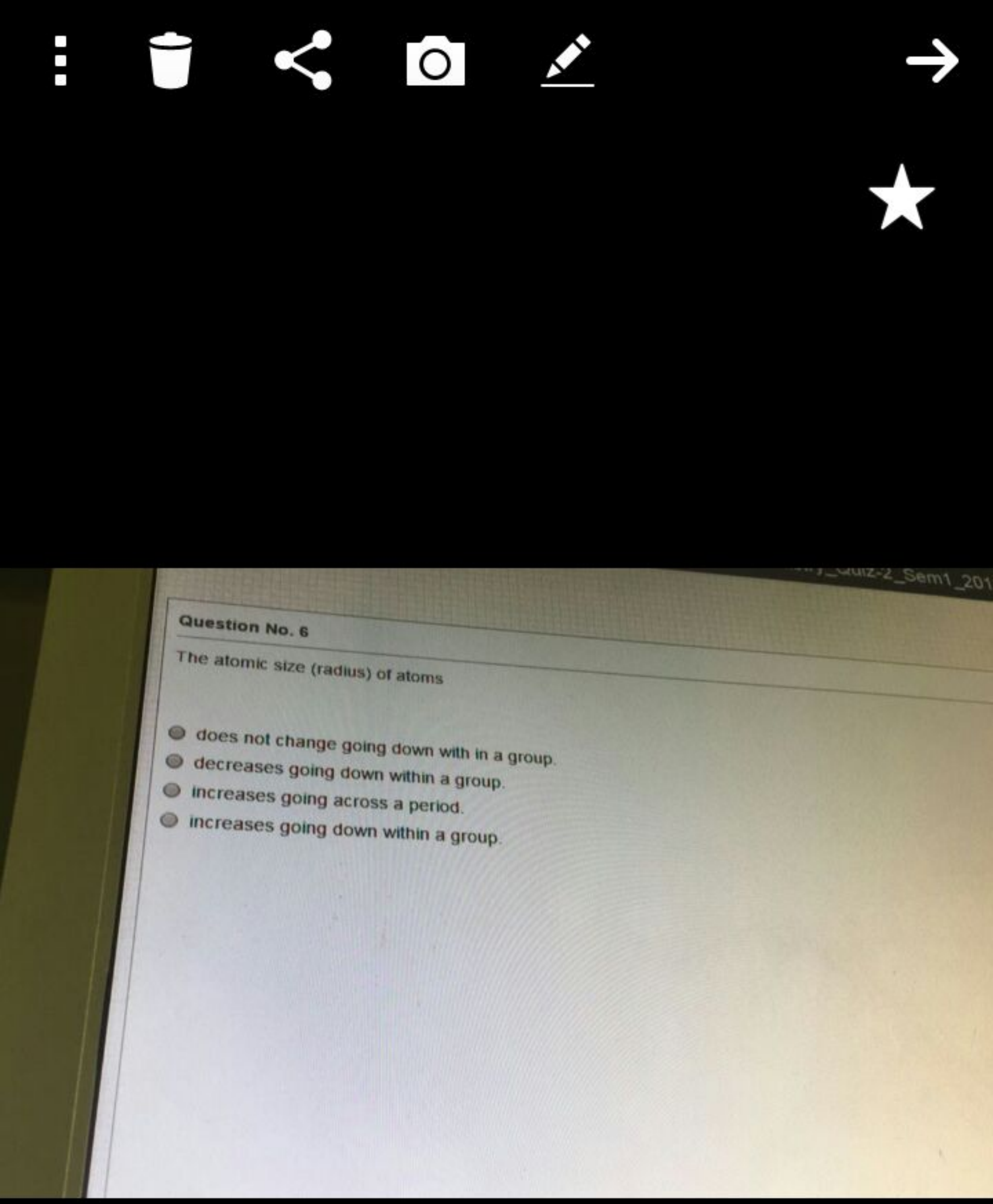
- neon
- iron
- chlorine
- argon

MKCL OES

Question No. 14

The most correct name for the compound SBr_6 is:

- monosulfur heptabromide
- sulfur bromide
- monosulfur hexabromide
- sulfur hexabromide


Question No. 6
The atomic size (radius) of atoms
does not change going down with in a group.
decreases going down within a group.
increases going across a period.
increases going down within a group.

Question No. 22

What substance is the oxidizing agent in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Cu2+
- Zn2+
- Zn
- Cu

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 20

Which of the following compounds gives a non electrolyte aqueous solution?

- $CaCl_2$
- H_2CO_3
- CH_4
- H_3PO_4

Question No. 24

Which of the following elements has the highest electronegativity?

- Si
- Mg
- S
- Cl

Save & Next حفظ والتالي

Question No. 16

How many moles of CO_2 could be produced when 3 moles of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3\ O_2 \rightarrow 2\ CO_2 + 3\ H_2O$$

- 6 mol
- 8 mol
- 2 mol
- 4 mol

Question No. 4

When an atom gains an electron, the resulting particle is called:

- a cation.
- an isotope.
- a proton.
- an anion.

Question No. 11

Which statement below accurately describes the contributions of Thomson?

- Ancient Greek philosopher who proposed that matter was continuous
- Proposed the modern Atomic Theory
- Discovered the existence of electrons
- Created the modern periodic table

Save & Next حفظ والتالي

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Time Remaining
62:14

User 3755939

Number of questions 25

2 Answered

1 Not Answ

22 Not Visited

1 2 3 4 5
8 9 10 11 12
15 16 17 18 19
22 23 24 25

Question No. 3

Which of the following properties is NOT a characteristic of the Group 1A(1) elements (alkali metals)?

- Most of them are liquids at room temperature.
- They are good conductors of heat.
- They are good conductors of electricity.
- They are shiny.

Question No. 1

The number of electrons in the outer energy level of a neutral atom of phosphorous is

- 2
- 8
- 3
- 5

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 1

What is the element with the electron configuration $1s^2 2s^2 2p^6 3s^2 3p^4$?

- F
- S
- Be
- Mg

Next

Chemistry_Sem1_ENH_2016-17

Time Remaining
74:27

User : 3758683

Number of questions : 25

0 Answered | 1 Not Answered | 24 Not Visited

1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25

Question No. 1

Neon has _____ valence electrons.

- 8
- 6
- 2
- 4

Save & Next حفظ والتالي

Instructions

End Test

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Question No. 1

The maximum number of electrons that can go in the main energy level 3 is?

- 18
- 32
- 8
- 10

Save & Next

Question No. 3

Copper is a member of which family?

(1) Transitional Metals
(2) alkaline earth metals
(3) noble gases
(4) halogens

User :3758683

Number of question

0 Answered

22 Not Visited

1 2 3

8 9 10

15 16 17

22 23 24

Question No. 3

How many molecules are in 237 g (about a cup) of water?

- 7.93×10^{24}
- 6.02×10^{23}
- 13.1
- 4267

Question No. 4

Which of the following does not describe a metal?

- Forms ionic compounds with nonmetals
- Tends to gain electrons
- Good conductor of heat
- Found on the left side of the periodic table

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Question No. 5

Of the elements: B, C, F and Li. The element with the smallest atomic radius is

- C
- F
- Li
- B

Save & Next حفظ والتالى

The elements cesium, potassium, and lithium

- have the same number of neutrons.
- are in the same group.
- are isotopes of each other.
- are in the same period of elements.

Save & Next حفظ والتالي

Question No. 2

Semiconductors are located in the periodic table on (or in) the

- left side of the table.
- first period of the table.
- right side of the table.
- line dividing metals from nonmetals in the table.

Save & Next حفظ والتالي

Question No. 3

How many molecules are in 237 g (about a cup) of water?

- 13.1
- 7.93×10^{24}
- 4267
- 6.02×10^{23}

Save & Next حفظ والتالي

Question No. 1

Only two electrons, with opposing spins, are allowed in each orbital is known as the

- Hund's rule.
- Heisenberg uncertainty principle.
- Aufbau principle.
- Pauli exclusion principle.

Question No. 5

Of the elements: B, C, F and Li. The element with the smallest atomic radius is

- C
- Li
- F
- B

Save & Next حفظ والتالي

Question No. 8

A compound that is composed of only carbon and hydrogen contains 80.0% C and 20.0% H by mass. What is the empirical formula of the compound?

- CH_3
- C_2H_6
- $C_{20}H_{60}$
- C_7H_{20}

Save & Next جفظ وتالي

Question No. 7

What is the coefficient of H_2O when the following equation is properly balanced with the smallest set of whole numbers?

$$\_\_\_ Na + \_\_\_ H_2O \rightarrow \_\_\_ NaOH + \_\_\_ H_2$$

- 3
- 4
- 1
- 2

Save & Next جمع والتالي

Question No. 5

The atomic size (radius) of atoms

- increases going across a period.
- does not change going across a period.
- decreases going across a period.
- decreases going down within a group.

Save & Next حفظ والتالي

Question No. 3

How many moles of water, H_2O, are present in 75.0 g H_2O?

- 4.17 moles
- 7.50 moles
- 4.41 moles
- 75.0 moles

Save & Next حفظ والتالي

ppaq (EI71)

Question No. 4

Which of these elements is most likely to be a good conductor of electricity?

- S
- Fe
- N
- He

Save & Next حفظ والتالي

Compaq LE1711

Question No. 10

What is the mass percent of carbon in ethane, C_2H_6?

- 25.2%
- 79.9%
- 20.1%
- 50.0%

Save & Next حفظ والتالى

Question No. 7

When balanced with the smallest set of whole numbers, the coefficient of O_2 in the following equation is:

$$\_\_ C_2H_4 + \_\_ O_2 \rightarrow \_\_ CO_2 + \_\_ H_2O$$

- 4
- 3
- 1
- 2

Question No. 6

Which of the following is a molecular compound?

- RbF
- $NaNO_3$
- CuF_2
- P_2O_4

Question No. 14

What is the term for the concentration expression that relates the moles of solute dissolved in each liter of solution?

- parts per million (ppm)
- molality (m)
- mass/mass percent (m/m %)
- molarity (M)

Question No. 13

In the reaction below, what is the theoretical yield in moles for NO when 5 moles of NH_3 react with 7 moles of O_2?

$$4\ NH_3 + 5\ O_2 \rightarrow 4\ NO + 6\ H_2O$$

- 5.0 mol
- 4.8 mol
- 2.4 mol
- 3.6 mol

hat is the chemical formula for the binary compound composed of Mg^{2+} and O^{2-} ions?

Mg_2O

Mg_2O_2

MgO_2

MgO

Save & Next حفظ والتالي

Question No. 21

In the following reaction, which reactant is a Brønsted-Lowry acid?

$H_2CO_3(aq) + Na_2HPO_4(aq) \rightarrow NaHCO_3(aq) + NaH_2PO_4(aq)$

- $NaHCO_3$
- NaH_2PO_4
- H_2CO_3
- Na_2HPO_4

For the following acid-base reaction, identify the products formed.

$$HCl + NaOH \rightleftharpoons ???? + ????$$

- NaCl, water
- NaCl, acid
- H_3OCl, acid
- $NaOH_2$, base

Save & Next حفظ والتالي

Question No. 25

Which of the following is not a conjugate acid/base pair?

- HBr / Br^-
- H_2SO_3 / SO_3^{2-}
- HCl / Cl^-
- HNO_3 / NO_3^-

Question No. 8

What is the empirical formula of the compound that has a composition by mass of 46.4% Mn, 17.5% P and 36.1% O?

- $Mn_3P_3O_8$
- $Mn_3P_2O_8$
- $Mn_3P_2O_5$
- MnPO

Question No. 15

Which of the following compounds gives a weak electrolyte aqueous solution?

- HCl
- NH_3
- $C_6H_{12}O_6$
- HBr

Save & Next حفظ والتالی

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Question No. 23

In an *acidic* solution, pH is _____ and $[H_3O^+]$ is _____.

- $< 7, < 1 \times 10^{-7}$ M
- $< 7, > 1 \times 10^{-7}$ M
- $= 7, 1 \times 10^{-7}$ M
- $> 7, < 1 \times 10^{-7}$ M

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Online Evaluation System

C

Question No. 4

Where is most of the mass of an atom concentrated?

- nucleus
- neutrons
- electrons
- protons

Save & Next حفظ والتالى

HP Compaq LE1711

Question No. 8

A compound that is composed of only carbon and hydrogen contains 85.7% C and 14.3% H by mass. What is the empirical formula of the compound?

- C_2H_4
- CH_4
- C_4H_8
- CH_2

Save & Next حفظ والتالي

Question No. 19

When the reverse reaction is favored

- The rate of the forward reaction is greater than the reverse reaction.
- The equilibrium constant is much greater than one; that is, $K_{eq} >> 1$
- The equilibrium constant is much less than one; that is, $K_{eq} << 1$
- The rate of the reverse reaction is less than the forward reaction.

Save & Next حفظ والتالى

Question No. 2

Semiconductors are located in the period

- left side of the table.
- first period of the table.
- right side of the table.
- line dividing metals from nonmetals in t

Question No. 12

How many grams of $AlCl_3$ could be produced when 5 moles of Cl_2 completely react with aluminum according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 622 g
- 833 g
- 445 g
- 733 g

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 19

Which of the following is true after a reaction reaches chemical equilibrium?

- The amount of products is increasing.
- The amount of reactants and products are equal.
- The amount of reactants is increasing.
- The amount of reactants and products are constant.

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 6

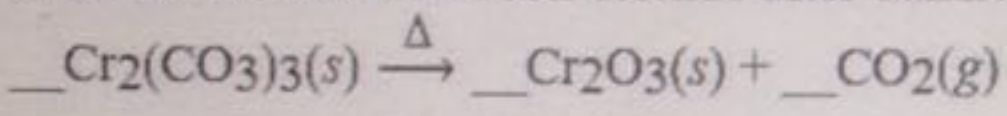
Which of the following is a molecular compound?

- $CuCl_2$
- CH_2Cl_2
- KI
- $NaNO_3$

ave & Next حفظ والتالي

Question No. 7

What is the coefficient of carbon dioxide after balancing the following equation?



- 1
- 4
- 2
- 3

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 7

When balanced with the smallest set of whole numbers, the coefficient of O_2 in the following equation is:

$$\_\_ C_2H_4 + \_\_ O_2 \rightarrow \_\_ CO_2 + \_\_ H_2O$$

- 4
- 3
- 1
- 2

User 3758

Number of

4 Answe

0 Not Vis

1 2

8 9

15 1

22 2

Question No. 5

Of the elements: B, C, F and Li. The element with the smallest atomic radius is

- F
- Li
- B
- C

Save & Next جतन व पुढील

Question No. 1

What is the element with the electron configuration $1s^2 2s^2 2p^6 3s^2 3p^5$?

- (●) F
- ( ) Be
- ( ) S
- ( ) Cl

Question No. 6

Which of the following is a molecular compound?

- $NaNO_3$
- RbF
- CuF_2
- P_2O_4

Save & Next حفظ والتالي

Question No. 25

Which of the following is not a conjugate acid/base pair?

- NH_4^+ / NH_2^-
- HSO_4^- / SO_4^{2-}
- H_2SO_4 / HSO_4^-
- $CH_3CO_2H / CH_3CO_2^-$

Save & Next حفظ والتالى

Question No. 12

Under appropriate conditions, nitrogen and hydrogen undergo a combination reaction to yield ammonia:

$$N_2\,(g) + 3\,H_2\,(g) \rightarrow 2NH_3\,(g)$$

A _____ g sample of N_2 requires 3.0 g of H_2 for complete reaction.

- 14
- 28
- 9
- 18

Question No. 2

Semiconductors are located in the periodic table on (or in) the

- left side of the table.
- first period of the table.
- right side of the table.
- line dividing metals from nonmetals in the table.

Save & Next حفظ والتالي

Question No. 7

What is the coefficient of H_2O when the following equation is properly balanced with the smallest set of whole numbers?

$$\_\_\_ Na + \_\_\_ H_2O \rightarrow \_\_\_ NaOH + \_\_\_ H_2$$

- 3
- 4
- 1
- 2

Save & Next جمع والتالي

Question No. 2

All of the following statements about different elements are true EXCEPT:

- Sulfur is considered a metalloid.
- Barium is an alkaline earth metal.
- Krypton is one of the noble gases.
- Manganese is a transition metal.

Save & Next حفظ والتالي

Question No. 17

What is the term for a bond composed of three electron pairs shared between two atoms?

- electrovalent bond
- triple bond
- single bond
- double bond

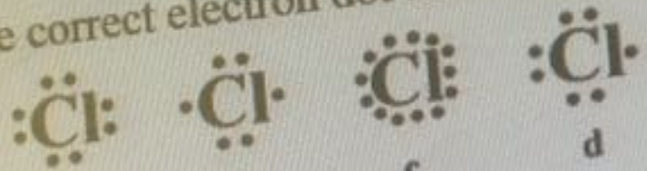
Question No. 4

Which of the following does not describe a metal?

- Tends to gain electrons
- Good conductor of heat
- Forms ionic compounds with nonmetals
- Found on the left side of the periodic table

Question No. 18

Which of the following is the correct electron dot structure for chlorine (atomic no. = 17)?



a b c d

- d
- c
- a
- b

have the same number of neutrons.

are in the same group.

are isotopes of each other.

are in the same period of elements.

Save & Next حفظ والتالي

ذا !

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Online Evaluation System

Chemistry_Sem1_I

Question No. 18

Which of the following is the electron dot formula (Lewis structure) for an atom of fluorine?

(a) F· (b) ·F· (c) ·F· (d) :F:

- (c)
- (d)
- (a)
- (b)

Save & Next حفظ والتالي

Question No. 6

Which of the following is a molecular compound?

- $NaNO_3$
- RbF
- CuF_2
- P_2O_4

Save & Next حفظ والتالي

Question No. 1

Any *f* orbital can hold up to _____ electrons.

- 8
- 14
- 6
- 18

Save & Next حفظ والتالي

Compaq LE1711

Question No. 10

The molar mass of $C_3H_8O_2$ is

- 69 g/mol
- 32 g/mol.
- 42 g/mol
- 76 g/mol

Save & Next حفظ والتالي

Question No. 7

What is the coefficient of oxygen gas after balancing the following equation?

$$\_\_H_2O_2(l) \xrightarrow{\Delta} \_\_H_2O(l) + \_\_O_2(g)$$

- 2
- 4
- 3
- 1

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 24

The compound AlF_3 can be described as a(n)

- Arrhenius acid.
- Lewis base.
- Brønsted-Lowry acid.
- Lewis acid.

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 10

Calculate the molar mass of H_2CO_3.

- 30 g/mol
- 90 g/mol
- 62 g/mol
- 32 g/mol

Save & Next حفظ والتالي

Question No. 10

Use the periodic table to answer the following question:
The formula CCl_4 has a molar mass of ___ g/mol.

- 146
- 154
- 150
- 140

Save & Next حفظ والتالي

Question No. 12

How many grams of $AlCl_3$ could be produced when 5 moles of Cl_2 completely react with aluminum according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 622 g
- 833 g
- 445 g
- 733 g

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 11

The name of the chemical compound $Fe_2(SO_4)_3$ is:

- iron sulfate
- iron(I) sulfate
- iron(III) sulfate
- iron(II) sulfate

Question No. 19

A chemical reaction has reached equilibrium when

- all products have been removed from the reaction mixture
- the rate of the forward reaction equals the rate of the reverse reaction
- all reactants have been converted to products.
- the concentrations of reactants and products are equal.

Question No. 2

All of the following statements about different elements are true EXCEPT:

- Sulfur is considered a metalloid.
- Barium is an alkaline earth metal.
- Krypton is one of the noble gases.
- Manganese is a transition metal.

Save & Next جتط رالقلى

Question No. 10

Calculate the molar mass of H_2CO_3.

- 30 g/mol
- 90 g/mol
- 62 g/mol
- 32 g/mol

Save & Next حفظ والتالي

Question No. 15

The distinguishing characteristic of all electrolyte solutions is that they

- conduct heat
- react with other solutions.
- contain molecules.
- conduct electricity.

Question No. 22

Which of the following is a diprotic acid?

- H_3PO_4
- $HC_2H_3O_2$
- HNO_3
- H_2SO_4

Save & Next حफ्ज़ व अगला

Question No. 7

What is the coefficient of H_2O when the following equation is properly balanced with the smallest set of whole numbers?

$$\_\_\_ Na + \_\_\_ H_2O \rightarrow \_\_\_ NaOH + \_\_\_ H_2$$

- 2
- 4
- 1
- 3

Save & Next حفظ والتالي

Question No. 8

A compound that is composed of only carbon and hydrogen contains 80.0% C and 20.0% H by mass. What is the empirical formula of the compound?

- CH_3
- C_2H_6
- $C_{20}H_{60}$
- C_7H_{20}

Save & Next حفظ وتالي

Question No. 23

What is the $[H_3O^+]$ in a solution with $[OH^-] = 1 \times 10^{-12}$ M?

- 1×10^{-8} M
- 1×10^{-12} M
- 1×10^{-2} M
- 1×10^{2} M

Save & Next حفظ والتالي

Question No. 24

Which of these species will act as a Lewis acid?

- BF_3
- H_2O
- NH_3
- F^-

Question No. 12

Under appropriate conditions, nitrogen and hydrogen undergo a combination reaction to yield ammonia:

$$N_2\,(g) + 3\,H_2\,(g) \rightarrow 2NH_3\,(g)$$

A 7.1-g sample of N_2 requires _____ g of H_2 for complete reaction.

- 0.76
- 1.5
- 1.2
- 0.51

Save & Next حفظ والتالي

Question No. 11

The name of the chemical compound NH_4NO_3 is:

- ammonium(I) nitrate
- ammonium(III) nitrite
- ammonium nitrate
- ammonium nitrite

Save & Next حفظ والتالي

Question No. 14

What is the term for the concentration expression that relates the moles of solute dissolved in each liter of solution?

- parts per million (ppm)
- molality (m)
- mass/mass percent (m/m %)
- molarity (M)

MKCL OES

Question No. 3

What is the mass of 0.250 mol of NH_3?

- 7.5 g
- 4.25 g
- 34 g
- 3.4 g

Save & Next حفظ والتالي

HP Compaq LE1711

الأصفر للأجوبة والأخضر لأفكار الأسئلة. تجميع CH 2

- جاب نص هوند Hund Rules: انو تعبي حبة حبة بعدين تبدأ تزاوج.
- مين اكتشف شحنة الالكترون مليكان بتجربة قطرة الزيت
- جاب التوزيع الي يوري الاتجاه ويقول ايش الي يعارض؟ نص باولي علشانهم كأنو اثنين في نفس الاتجاه.
- كم الكترون فـf ؟ ١٤
- الدرس الأخير يقولك مثلاً ال IE حقت البوتاسيوم أكبر من أي واحد من العناصر
- مركب فيه ٢٥ isotopes قلي كم عدد النيترونات فيه؟
- وجابلي قلي الماس تبع عنصر يساوي ٢٠٧ كم عدد البروتونات فيه تروحو تدورو العنصر اللي عددو ٢٠٧ وتنقصوه من ٨٢ يطلع ١٢٥
- جاء توزيع الكتروني وانا اختار دا التوزيع تبع اي عنصر
- مقارنة بين العناصر من حيث الترند نصف القطر وطاقة التأين والإلكترون افينيتي.
- عناصر و قال هيا في فتره ولا عامود
- ايش اللي لها كتلته كبيره يعني المهم انها النواه
- مين عمل النظرية الذرية؟ دالتون.
- كم الكترون في المستوى الرابع. *٣٢*
- عدد الجرامات لجزيء S2O في ١,٨ مول.
- الايون اللي له شحنه +١. *خسر ١ الكترون*
- التوزيع الالكتروني لأيون الفلورايد.
- الصوديوم يعتبر ايش؟ *Metal*
- ايش اللي تعتبر أشباه فلزات*metalloid* (semiconductor).

- **If 2 moles of an element are weighting 54 g .these element is most likely:**
  a) Al with molar mass of 27
  b) silver with molar mass of 108
  c) Mg withe molar mass 55 g
  d) P with molar mass 31 g

- **the maximum number of electron that can go in the main energy level 3 is :**
  a) 8
  b) 18
  c) 32
  d) 10

- **Ionization energy is:**
  a) the energy in an ion acquires from an electron
  b) higher for potassium that Li
  c) the energy needed to remove the least tightly bounded electron
  d) highest for metals in group 1A (1)

- **7-the element rubidium, sodium, potassium?**
  a) are in the same group

- **Which of the following element has the greatest ability to lose electrons:**
  Francium
  Lithium
  Sodium
  Potassium

- **Which statement is incorrect?**
  1- atom has mass
  2- atom invisible
  3- each element contains different atom
  4- atom consists subatomic

Zainab Jeddo

Question No. 24

Which of the following elements has the lowest electronegativity?

- chlorine
- bromine
- fluorine
- iodine

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 17

What is the percent yield for a reaction if its theoretical yield is 85 g and its actual yield is 70 g?

- 82%
- 60%
- 86%
- 56%

Question No. 5

The molecular formula of aspirin is $C_9H_8O_4$. How many aspirin molecules are present in one 500-milligram tablet?

- 1.67×10^{21} molecules
- 2.77×10^{-3} molecules
- 2.77 molecules
- 1.67×10^{24} molecules

Question No. 8

The coefficients (a,b,c) needed to balance the equation below are:

$$a\,Li + b\,Cl_2 \rightarrow c\,LiCl$$

- (2,1,2)
- (1,2,1)
- (1,2,2)
- (2,2,1)

Question No. 9

Covalent bonding is a

- sharing of electrons
- gain of electrons.
- loss of electrons.
- transfer of electrons.

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 4 mol
- 6 mol
- 2 mol
- 8 mol

Save & Next حفظ والتالي

Question No. 9

A covalent bond is best described as

- a bond between a metal and a nonmetal.
- the transfer of electrons.
- a bond between a metal and a polyatomic ion.
- the sharing of electrons between atoms.

Question No. 5

Calculate the mass of 500 atoms of iron (Fe).

- 4.64×10^{-20} g Fe
- 56 g Fe
- 1.22 g Fe
- 6.02×10^{23} g Fe

Question No. 15

The charge of nitrate ion is:

- 2-
- 2+
- 1-
- 1+

Question No. 23

Which molecule contains the strongest carbon-carbon bond?

- $F_2C{=}CF_2$
- $HC{\equiv}CH$
- $H_3C{-}CH_3$
- $H_2C{=}CH_2$

Question No. 22

What term describes a reactant that gains electrons from another reactant?

- oxidizing agent
- precipitate
- base
- reducing agent

Question No. 6

The atomic size (radius) of atoms

- does not change going down with in a group.
- decreases going down within a group.
- increases going across a period.
- increases going down within a group.

Question No. 24

Which of the following elements has the highest electronegativity?

- Si
- Mg
- S
- Cl

Save & Next حفظ والتالي

Question No. 18

If 3.0 moles of KI is dissolved in enough water to make 12.0 L of solution, what is the molarity of this solution?

- 0.25 M
- 4.0 M
- 0.5 M
- 0.75 M

Question No. 10

Nitrogen and oxygen form an extensive series of oxides with the general formula N_xO_y. What is the empirical formula for an oxide that contains 63.65% nitrogen?

- N_2O
- N_2O_3
- NO_2
- NO

Question No. 2

The maximum number of electrons that may occupy the fourth electron energy level is ____

- 32
- 2
- 8
- 18

CHEM 101 SUPPLEMENTAL INFORMATIO

$°C = \frac{(°F - 32)}{1.8}$	$°F = 1.8\,(°C) + 32$	$°C = K - 273$	
$M_1V_1 = M_2V_2$	$K_W = [H_3O^+][OH^-]$	$K_W = 1 \times 10^{-14}$	
$n = \text{Emp. Form. } X\ n$ $\frac{\text{olar mass}}{\text{m molar mass}}$	$\%\ yield = \frac{\text{actual yield}}{\text{theoretical yield}} X\ 100$		n
$w = -P\Delta V$	$q = m \times C_s \times \Delta T$	1 L.atm = 101.3 J	

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 12

The systematic name for the chemical compound NaBr is:

- sodium(I) bromide
- sodium(II) bromide
- sodium bromide
- sodium monobromide

Question No. 16

How many moles of $AlCl_3$ could be produced when 284 grams of Cl_2 completely react with aluminum according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 3.92 mol
- 3.33 mol
- 4.60 mol
- 2.67 mol

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Question No. 25

Which of the following compounds contains a polar covalent bond?

- NaF
- HCl
- Br_2
- MgO

Save & Next حفظ والتالي

Question No. 20

Which of the following compounds gives a strong electrolyte aqueous solution?

- Na_2CO_3
- H_3PO_4
- $C_6H_{12}O_6$
- H_2CO_3

Save & Next حفظ والتالي

Question No. 23

A reaction that releases energy as it occurs, is classified as _____.

- oxidation-reduction reaction
- exothermic reaction
- catalyzed reaction
- endothermic reaction

Question No. 23

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- endothermic reaction

Question No. 25

Which of the following compounds contains a polar covalent bond?

- Br_2
- HCl
- MgO
- NaF

Question No. 23

A reaction that releases energy as it occurs, is classified as _____.

- oxidation-reduction reaction
- exothermic reaction
- catalyzed reaction
- endothermic reaction

Question No. 8

For the following reaction, what is the correct coefficient for the H_2?

$$Al + HCl \rightarrow AlCl_3 + H_2$$

- 4
- 2
- 1
- 3

Question No. 25

Which of the following is the electron dot formula (Lewis structure) for an atom of potassium?

(a) K· (b) K· (c) ·K: (d) :K:

- (d)
- (b)
- (a)
- (c)

Question No. 25

Which of the following compounds contains a polar covalent bond?

- Br_2
- HCl
- MgO
- NaF

Question No. 20

Which of the following compounds gives a non electrolyte aqueous solution?

- HF
- $C_6H_{12}O_6$
- $HClO_4$
- CH_3COOH

Save & Next حفظ والتالي

Question No. 13

What is the molar mass of copper(II) sulfate, $CuSO_4$?

- 111.6 g/mol
- 63.60 g/mol
- 159.6 g/mol
- 16.00 g/mol

Time Remaining
62:14

User 3755939

Number of questions 25

2 Answered

1 Not Answ

22 Not Visited

1 2 3 4 5
8 9 10 11 12
15 16 17 18 19
22 23 24 25

Question No. 3

Which of the following properties is NOT a characteristic of the Group 1A(1) elements (alkali metals)?

- Most of them are liquids at room temperature.
- They are good conductors of heat.
- They are good conductors of electricity.
- They are shiny.

Question No. 23

A reaction that releases energy as it occurs, is classified as _____.

- oxidation-reduction reaction
- exothermic reaction
- catalyzed reaction
- endothermic reaction

Chemistry

Question No. 13

What is the mass percent of potassium in K_2CO_3?

- 34.7%
- 45.3%
- 54.7%
- 56.6%

Save & Next حفظ والتالي

Question No. 22

In an oxidation-reduction reaction, the substance reduced always

- gives up hydrogen atoms.
- shows a loss of electrons.
- shows a gain of electrons.
- takes on oxygen atoms.

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Online Evaluation System

Question No. 2

Which of these choices is the electron configuration for the fluoride ion?

- $1s^2 2s^2 2p^6 3s^2 3p^6 3s^1$
- $1s^2 2s^2 2p^6$
- $1s^2 2s^2 2p^5$
- $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$

Question No. 22

In an oxidation-reduction reaction, the substance reduced always

- gives up hydrogen atoms.
- shows a loss of electrons.
- shows a gain of electrons.
- takes on oxygen atoms.

Question No. 6

The atomic size (radius) of atoms

- decreases going down within a group.
- increases going down within a group.
- increases going across a period.
- does not change going down with in a group.

Save & Next حفظ والتالى

Question No. 21

A neutralization reaction between an acid and base produces _____.

- oxygen gas
- water and a salt
- hydrogen gas
- sodium hydroxide

MKCL OES

Question No. 1

Who formulated the modern atomic theory?

- Nivaldo Tro
- John Dalton
- Antoine Lavoisier
- John Dalton and Antoine Lavoisier

Save & Next

Question No. 22

What is the oxidation number of metallic sodium in the elemental state?

- +2
- 0
- +1
- +3

Save & Next حفظ والتالي

Question No. 6

The ionization energy of atoms

- does not change going down within a group.
- decreases going across a period.
- decreases going down within a group.
- increases going down within a group.

Question No. 22

What substance is the oxidizing agent in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Cu2+
- Zn2+
- Zn
- Cu

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 1

What does "X" represent in the following symbol?

$$^{80}_{35}X$$

- bromine
- chlorine
- scandium
- iron

Save & Next جمع و تالي

Question No. 21

According to the Arrhenius concept, if KOH were dissolved in water, it would act as

- a proton acceptor.
- an acid.
- a base.
- an electron pair acceptor.

MKCL OES
Online Evaluation System

Question No. 14

The most correct name for the compound SBr_6 is:

- monosulfur heptabromide
- sulfur bromide
- monosulfur hexabromide
- sulfur hexabromide

1️⃣John Dalton : modren atomic theory & the law of multiple prop
2️⃣J.J Tomson : plum pudding & electron
3️⃣Rutherford : gold foil experiment & discover nucleus, protons
4️⃣Bohr : orbitals and quanty energy level
5️⃣Robert Millikan : oil drop experiment & mass and charge of electron
6️⃣Demetre Mandeleev : periodic law & first periodic table
7️⃣Mosely : modren table of atomic number
8️⃣James Chadwick : discovered neutrons
9️⃣Schwardinger : electron cloud model
🔟Binning and Rohrer : developed microscope to study atom
1️⃣1️⃣Antonie Lavoisir : law of conservation of mass
1️⃣2️⃣Jozeph Prust : the law of definite proportion

MKCL OES
Online Evaluation System

Question No. 7

Which family is most likely to form diatomic molecules?

- Group VII-A
- Group VIII-A
- Group V-A
- Group VI-A

Question No. 24

Which of the following elements has the highest electronegativity?

- Si
- Mg
- S
- Cl

Save & Next حفظ والتالي

Question No. 2

Which describes the valance electrons of calcium?

- $4s^2$
- $4s^2d^1$
- $4s^0$
- $4s^1$

Question No. 10

A chemical equation is balanced when

- the number of atoms of each element is the same in reactants and products.
- the total number of ions is the same in reactants and products
- the sum of the coefficients of the reactants is equal to the sum of the coefficients of the produ
- the total number of molecules is the same in reactants and products

MKCL OES

Chemistry_Quiz-2_Sem1_2016-17

Question No. 1

What is the atomic symbol for gold?

- Ag
- Au
- As
- Ar

Save & Next حفظ والتالي

PERIO

Question No. 23

Which molecule contains the strongest carbon-carbon bond?

- $F_2C{=}CF_2$
- $HC{\equiv}CH$
- $H_3C{-}CH_3$
- $H_2C{=}CH_2$

Question No. 22

In which species does sulfur have the highest oxidation number?

- H_2SO_3
- K_2SO_4
- SO_2
- H_2S

Save & Next حفظ والتالي

Question No. 25

The number of lone pairs in HCl is ---------.

- 2
- 3
- 0
- 1

Question No. 5

How many iron atoms are contained in 354 g of iron?

- 4.69×10^{24} Fe atoms
- 2.13×10^{26} Fe atoms
- 2.62×10^{25} Fe atoms
- 3.82×10^{24} Fe atoms

Question No. 19

What is the molarity of HCl solution prepared by diluting 600.0 mL of 1.00 M HCl to a total volume of 1.5 L?

- 2.0 M
- 0.1 M
- 0.2 M
- 0.4 M

Question No. 21

According to the Arrhenius concept, if $Ca(OH)_2$ were dissolved in water, it would act as

- an acid.
- an electron pair acceptor.
- a base.
- a proton acceptor.

Save & Next حفظ والتالی

MKCL OES

Chemistry_Quiz-2_Sem1_2016-17

User: 375

Number of

4

19

1 2

8 9

15 16

22 23

Question No. 5

Determine the number of moles of aluminum in 96.7 g of Al

- 3.58 mol
- 7.43 mol
- 4.21 mol
- 0.279 mol

Save & Next

PERIODIC TABL

M1V1 = M2 V2

Molecular Form. = Emp. Form. x
Molar mass
n = Emp. Form. Molar mass

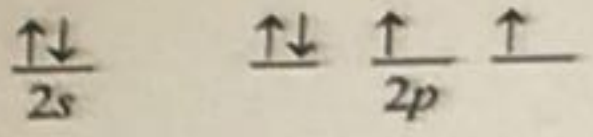
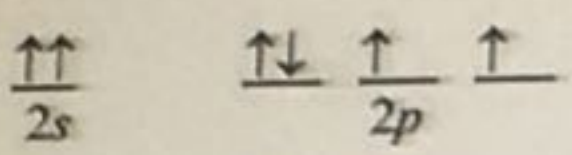
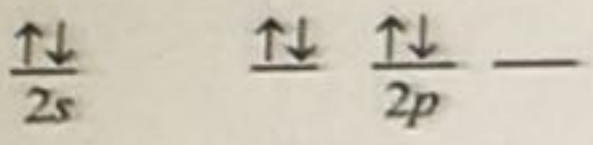
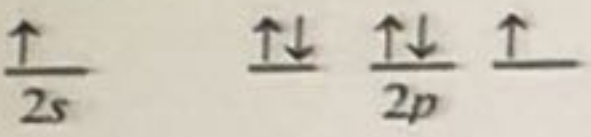
Question No. 25

The number of lone pairs in HCl is ------

- 2
- 3
- 0
- 1

Question No. 2

Which valence orbital-filling diagram represents the ground state of oxygen?

- ○ 
- ○ 
- ◉ 
- ○ 

Save & Next حفظ والتالي

Question No. 7

One of the following elements exists as a diatomic molecule:

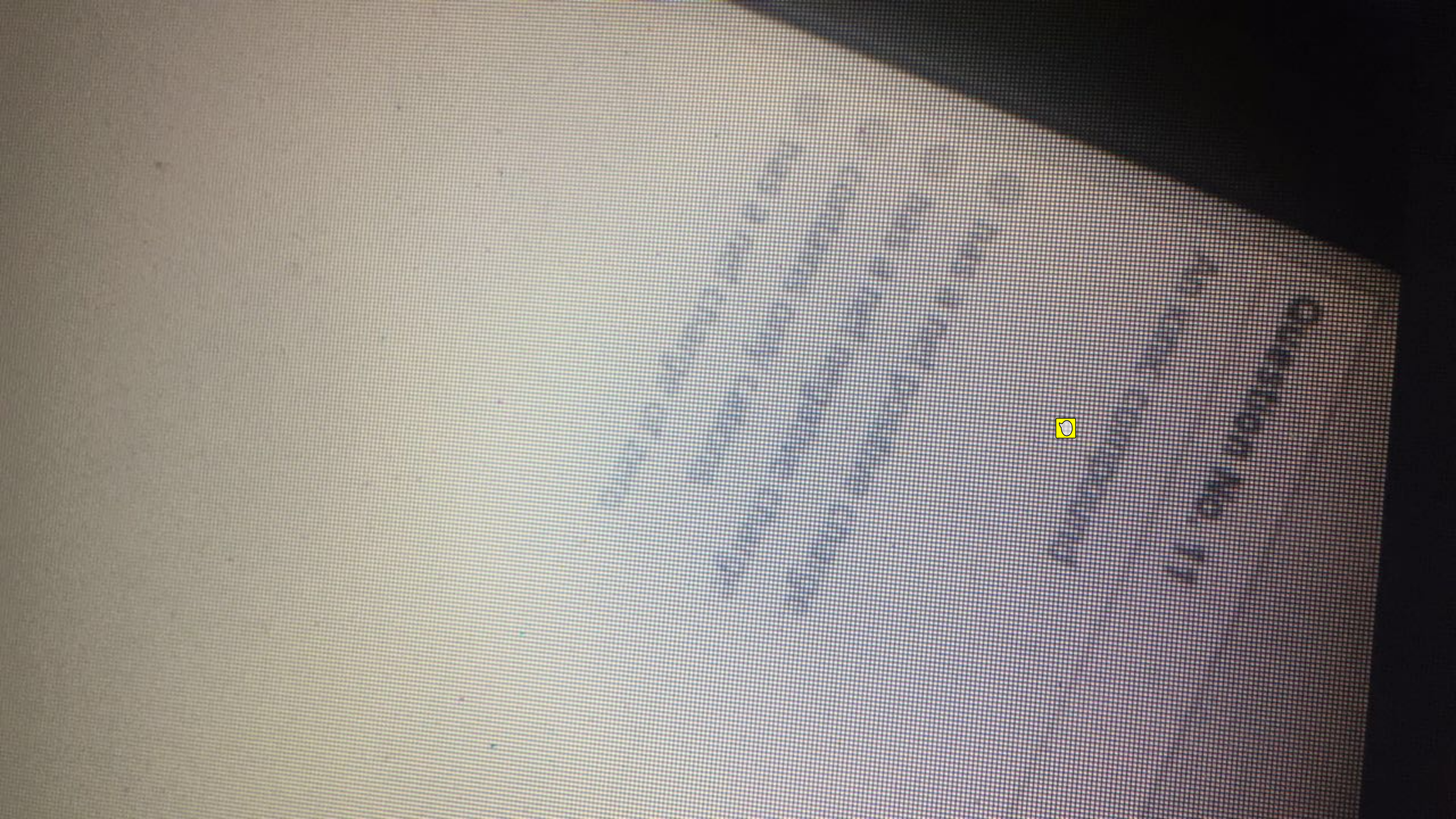
- neon
- iron
- chlorine
- argon

Question No. 12

The systematic name for the chemical compound NaBr is:

- sodium(II) bromide
- sodium bromide
- sodium monobromide
- sodium(I) bromide

Save & Next حفظ والتالي



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Question No. 1

What is the atomic symbol for gold?

- Au
- As
- Ar
- Ag

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 3

The elements lithium, beryllium, and boron _____.

- have the same number of neutrons
- are in the same period
- are isotopes of each other
- are in the same group

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Question No. 2

One element that has 5 valence electrons is _____

- nitrogen
- lithium
- carbon
- sulfur

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Question No. 6

The atomic size (radius) of atoms

- does not change going down with in a group.
- decreases going down within a group.
- increases going across a period.
- increases going down within a group.

Question No. 7

Aluminum fluoride is considered which of the following?

- molecular compound
- molecular element
- ionic compound
- atomic element

15 16 17
22 23 24 25

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Question No. 1

Which statement below accurately describes the contributions of Thomson?

- Ancient Greek philosopher who proposed that matter was continuous
- Discovered the existence of electrons
- Created the modern periodic table
- Proposed the modern Atomic Theory

Save & Next حفظ والتالي

Question No. 6

Of the elements: B, C, F and Li. The element with the smallest ionization energy is

- Li
- C
- F
- B

Save & Next جतन व पुढील

QUESTION: 3

Question:

The number of electron lone pairs in the water molecule is

Options:

2

4

8

3

Question No. 2

Which describes the valance electrons of calcium?

- $4s^2d^1$
- $4s^1$
- $4s^2$
- $4s^0$

Save & Next حفظ والتالي

Question No. 22

What is the oxidation number of sulfur in H_2SO_4?

- +6
- +2
- -2
- +4

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Question No. 6

Based on periodic table trends, Which of these elements has the largest atomic radius?

- magnessium
- barium
- beryllium
- calcium

Question No. 4

Which of the following statements about ions is INCORRECT?

- Cations always have the same number of protons as electrons.
- Cations are formed when an atom loses electrons.
- Cations are positive ions and anions are negative ions.
- Anions are formed when an atom gains electrons.

Question No. 6

How many iron atoms are contained in 354 g of iron?

- 2.62×10^{25} Fe atoms
- 2.13×10^{26} Fe atoms
- 4.69×10^{24} Fe atoms
- 3.82×10^{24} Fe atoms

Save & Next حفظ والتالي

Question No. 7

Aluminum fluoride is considered which of the following?

- ionic compound
- atomic element
- molecular element
- molecular compound

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Question No. 15

Which of the following polyatomic ions has a positive charge?

- sulfate ion
- carbonate ion
- hydroxide ion
- ammonium ion

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Question No. 15

The charge of nitrate ion is:

- 2-
- 1+
- 2+
- 1-

Question No. 25

The number of lone pairs in HCl is ------.

- 2
- 3
- 0
- 1

Question No. 8

For the following reaction, what is the correct coefficient for the H_2?

$$Al + HCl \rightarrow AlCl_3 + H_2$$

- 4
- 1
- 3
- 2

Save & Next حفظ وتالي

Question No. 22

Which one of the following equations describes a *redox* reaction?

- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Question No. 23

A reaction that releases energy as it occurs, is classified as _____.

- oxidation-reduction reaction
- exothermic reaction
- catalyzed reaction
- endothermic reaction

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 8

The coefficients (a,b,c) needed to balance the equation below are:

$$a\,H_2 + b\,O_2 \rightarrow c\,H_2O$$

- (2,1,2)
- (2,2,1)
- (1,2,1)
- (1,2,2)

Question No. 1

What does "X" represent in the following symbol?

$$^{28}_{14}X$$

- zinc
- sulfur
- nickel
- silicon

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Question No. 23

Which one of the following pairs atoms can form a polar covalent bond?

- Ca and I
- H and Br
- S and S
- H and H

Save & Next

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Question No. 7

Which family is most likely to form diatomic molecules?

- Group VI-A
- Group VII-A
- Group V-A
- Group VIII-A

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Question No. 10

A compound that is composed of only carbon and hydrogen contains 80.0% C and 20.0% H by mass. What is the empirical formula of the compound?

- C_2H_6
- $C_{20}H_{60}$
- C_7H_{20}
- CH_3

Question No. 4

What is the charge on the oxygen ion?

- 1+
- 2-
- 2+
- 1-

Question No. 24

Which of the following is a general trend for the electronegativity of elements in the periodic table?

- increases from left to right; decreases from bottom to top
- decreases from left to right; increases from bottom to top
- increases from left to right; increases from bottom to top
- decreases from left to right; decreases from bottom to top

Save & Next حفظ والتالي

Question No. 2

Which describes the valance electrons of calcium?

- 4s2
- 4s2d1
- 4s0
- 4s1

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 15

The charge of hydroxide ion is:

- 2+
- 1+
- 1-
- 2-

Question No. 12

The systematic name for the chemical compound NaBr is:

- sodium(I) bromide
- sodium(II) bromide
- sodium bromide
- sodium monobromide

Question No. 4

When an atom gains an electron, the resulting particle is called:

- a cation.
- an isotope.
- a proton.
- an anion.

Question No. 11

The name of the chemical compound CuF is:

- Copper(III) fluoride
- Copper fluoride
- Copper(I) fluoride
- Copper(II) fluoride

Question No. 20

Which of the following compounds will form a solution with water that is a good conductor of electricity?

- CCl_4
- NH_3
- HNO_3
- CO_2

Question 1

What are the possible orbitals for $n = 3$?

A. s, p, d

B. s, p, d, f

C. S

D. s, p

Question 2

How many orbitals are contained in the third principal level ($n = 3$) of a given atom?

A. 9

B. 3

C. 18

D. 7

E. 5

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Question No. 7

One of the following elements exists as a diatomic molecule:

- chlorine
- iron
- argon
- neon

Save & Next

Ionization energy is

- the energy an ion acquires from an electron.
- higher for potassium than for lithium.
- the energy needed to remove the least tightly bound electr
- highest for metals in Group 1A(1).

Question 2

Calcium (Ca) has a larger atomic radius than bromine (Br) because calcium

A. more electrons

B. fewer electrons

C. more energy levels

D. fewer energy levels

Question 3

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Question No. 14

One element that has ONE valence electrons is _____.

- lithium
- carbon
- sulfur
- nitrogen

Save & Next

Question No. 12

The charge of electron was established by

- Millikan's oil drop experiment.
- Rutherford's gold foil experiment.
- Dalton's atomic experiment
- Thomson's cathode ray tube experiment.

Question No. 17

How many moles and how many atoms of zinc are in a sample weighing 34.

- 0.533 mol, 8.85×10^{-25} atoms
- 1.87 mol, 1.13×10^{24} atoms
- 1.87 mol, 3.10×10^{-24} atoms
- 0.533 mol, 3.21×10^{23} atoms

Question No. 23

Which of the following elements is a metal?

- nitrogen
- fluorine
- strontium
- argon

Save & Next

Question No. 21

How many sulfur dioxide molecules (SO_2) are there in 1.80 mol of sulfur dioxide?

- 1.08×10^{23}
- 6.02×10^{24}
- 1.08×10^{24}
- 1.80×10^{24}

Save & Next حفظ والتالي

Question No. 22

How many iron atoms are contained in 354 g of iron?

- 2.62×10^{25} Fe atoms
- 3.82×10^{24} Fe atoms
- 2.13×10^{26} Fe atoms
- 4.69×10^{24} Fe atoms

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Question No. 18

The Group 8A (18) elements

- are unreactive.
- are liquids at room temperature.
- are good conductors of electricity.
- melt at high temperatures.

Question No. 17

All of the following statements about different elements are true EXCEPT:

- Barium is an alkaline earth metal.
- Krypton is one of the noble gases.
- Manganese is a transition metal.
- Lithium is considered a metalloid.

Question No. 16

The elements xenon, helium and argon

- are isotopes of each other.
- are in the same period of elements.
- have the same number of neutrons.
- are in the same group.

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CHEM Quiz

Question No. 21

0.100 mole of lithium weighs

- 3.00 g.
- 0.694 g.
- 0.300 g.
- 6.94 g.

Question No. 18

The elements rubidium, sodium, and potassium _____.

- are isotopes of each other
- are in the same period of elements
- are in the same group
- have the same number of neutrons

Save & Next جطا والتالى

Question No. 24

Which of these elements has the highest electron affinity?

- Rubidium
- Cesium
- Lithium
- Potassium

Save & Next حفظ والتالي

Question No. 25

The atomic radius of krypton is smaller than the atomic radius of _____.

- xenon
- neon
- helium
- argon

Save & Next सेव्ह व पुढील

Question No. 23

Where is most of the mass of an atom concentrated?

- nucleus
- neutrons
- electrons
- protons

Question No. 20

4.00 moles of sodium have a mass of

- 23.0 g.
- 44.0 g.
- 92.0 g.
- 11.0 g.

Question No. 19

When an atom gains an electron, the resulting particle is called:

- a cation.
- an isotope.
- a proton.
- an anion.

Question No. 12

Which of the following is NOT a correct name, symbol combination?

- potassium, P
- manganese, Mn
- magnesium, Mg
- iorn Fe

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Question No. 18

Germanium is an example of a(n) _____.

- nonmetal
- noble gas
- metalloid
- alkali metal

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Question No. 15

Helium has _____ valence electrons.

- 6
- 8
- 2
- 4

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Question No. 17

Francium is an example of an element that is a _____.

- nonmetal
- noble gas
- metalloid
- metal

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Question No. 16

Group 8A elements are also called:

- alkaline earth metals.
- alkali metals.
- noble gases.
- halogens.

Question No. 14

Which of these choices is the electron configuration for the fluoride ion?

- $1s^2 2s^2 2p^6 3s^2 3p^6 3s^1$
- $1s^2 2s^2 2p^6$
- $1s^2 2s^2 2p^5$
- $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$

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Question No. 13

When filling orbitals that have same energy with electrons, fill them singly first, with parallel spins, is known as

- Aufbau principle.
- Heisenberg uncertainty principle.
- Pauli exclusion principle.
- Hund's rule.

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Question No. 22

The molecular formula of aspirin is $C_9H_8O_4$. How many aspirin molecules are present in one 500-milligram tablet?

- 1.67×10^{24} molecules
- 1.67×10^{21} molecules
- 2.77 molecules
- 2.77×10^{-3} molecules

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Question No. 24

Which of these elements has the highest electron affinity?

- Rubidium
- Cesium
- Lithium
- Potassium

Question No. 23

Semiconductors are usually

- nonmetals.
- metals.
- noble gases.
- metalloids.

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Question No. 13

According to Hund's Rule

- no two electrons in the same atom can have the same four quantum numbers.
- electrons found in the same orbital must have the same spin.
- electrons fill orbitals of the same energy singly and pair up only after the orbitals are all half filled.
- electrons pair first before filling other orbitals with same energy

Save & Next जतन व पुढील

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Question No. 12

The existence of electrons in atoms of all elements was demonstrated by

- Thomson's cathode ray tube experiment.
- Dalton's atomic experiment
- Millikan's oil drop experiment.
- Rutherford's gold foil experiment.

Question No. 11

Which statement below accurately describes the contributions of Thomson?

- (•) Ancient Greek philosopher who proposed that matter was continuous
- ( ) Proposed the modern Atomic Theory
- ( ) Discovered the existence of electrons
- ( ) Created the modern periodic table

Save & Next جمع والتالي

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Question No. 19

When an atom gains an electron, the resulting particle is called:

- a cation.
- an isotope.
- a proton.
- an anion.

Save & Next حفظ والتالى

الملاحظات المحلية

🔴ماهي شحن تأين اليود ؟

1-

🔴How many elctorns in the fourth energy level?

2

8

18

32✔

🔴Which of the following is not matter?

Energy ✔

Cheese

Blood

🔴المبدأ الذي يدل على ان الالكترون يترتب من المستوى الاقل هو للعالم ؟ (تقريباً كدا صيغة السؤال)

باولي

افباو ✔

Question No. 24

Of the elements: B, C, F and Li. The element with the most metallic character is

- Li
- C
- B
- F

Save & Next حفظ والتالي

Question No. 16

Which of these elements is chemically similar to magnesium?

- Nickel
- Calcium
- Sulfur
- Iron

Save & Next حفظ والتالي

Question No. 15

Oxygen has _____ valence electrons.

- 8
- 4
- 2
- 6

Save & Next حفظ والتالي

Question No. 19

An atom containing 7 protons, 8 neutrons and 7 electrons.

- cannot exist.
- is an ion.
- has a neutral charge.
- is an oxygen atom.

Save & Next حफ़्ज़ व पुढील

Question No. 25

The atomic radius of magnesium is higher than the atomic radius of _____.

- strontium
- barium
- calcium
- beryllium

Save & Next जतन व पुढील

Question No. 12

The existence of electrons in atoms of all elements was demonstrated by

- Thomson's cathode ray tube experiment.
- Dalton's atomic experiment
- Millikan's oil drop experiment.
- Rutherford's gold foil experiment.

Save & Next حفظ والتالي

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 4 mol
- 6 mol
- 2 mol
- 8 mol

Save & Next

- sharing of electrons
- gain of electrons.
- loss of electrons.
- transfer of electrons.

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 4 mol
- 6 mol
- 2 mol
- 8 mol

Question No. 18

A solution is made by dissolving 2.68 mole of KF in enough water to give a final volume of 1030 mL. What is the molarity of the solution?

- 0.800 M
- 0.125 M
- 2.60 M
- 1.52 M

Question No. 20

Which of the following compounds gives a strong electrolyte aqueous solution?

- CH_3COOH
- $C_6H_{12}O_6$
- CH_4
- $HClO_4$

Save & Next حفظ والتالي

Question No. 20

Which of the following compounds gives a non electrolyte aqueous solution?

- H_3PO_4
- H_2CO_3
- Na_2CO_3
- CCl_4

Question No. 5

The molecular formula of aspirin is $C_9H_8O_4$. How many aspirin molecules are present in one 500-milligram tablet?

- 1.67×10^{21} molecules
- 2.77×10^{-3} molecules
- 2.77 molecules
- 1.67×10^{24} molecules

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 4 mol
- 6 mol
- 2 mol
- 8 mol

Save & Next

Pear:

① $CaCl_2$ → Calcium Chloride

② Fe_2O_3 → iron (III) Oxide

③ LiF → Lithium Fluoride

④ $CuBr$ → Copper (I) Bromide

⑤ $Mg(NO_3)_2$ → Magnesium Nitrate

⑥ Fe_2S_3 → iron (III) Sulfide

⑦ CuS → Copper (II) Sulfide

⑧ $NaNO_2$ → Sodium Nitrite

⑨ Al_2S_3 → Aluminum Sulfide

⑩ $Al(OH)_3$ → Aluminum hydroxide

⑪ Cu_2CO_3 → Copper (I) Carbonate

⑫ $Fe(HCO_3)_3$ → iron (III) bicarbonate

⑬ $(NH_4)_2SO_3$ → Ammonium Sulfite

⑭ NH_4NO_3 → Ammonium Nitrate

⑮ $Al_2(SO_4)_3$ → Aluminum Sulfate

⑯ $Al(OH)_3$ → Aluminum hydroxide

⑰ $Ba(HCO_3)_2$ → Barium Bicarbonate

1

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Why no

① AgF → Silver Fluoride

② $Ag(No_3)$ → Silver Nitrate

③ CO_2 → Carbon Dioxide

④ HCl → Hydrochloric Acid

⑤ P_2O_5 → Diphosphorus pentaOxide

⑥ NF_3 → Nitrogen Trifluoride

⑦ N_2O_4 → Dinitrogen TetraOxide

CO → Carbon mono Oxide

HBr → hydrobromic Acid

P_2O_5 → Diphosphours PentaOxide

H_2O → Dihydrogen Mono Oxide

N_2O → Dinitrogen Mono Oxide

H_2S → Dihydrogen Mono sulfide

N_2H_4 → Dinitrogen Tetrahydride

H_2O → Dihydrogen Mono Oxide

N_2O → Dinitrogen Mono Oxide

H_2S → Dihydrogen Mono sulfide

N_2H_4 → Dinitrogen Tetrahydride

S_2F_{10} → Disulf decafluoride

SF_6 → Sulf hexa Fluoride

No → Nitrogen Monoxide

H_2O → Dihydrogen Mono Oxide

$Ca(OH)_2$

↓

Calcium hydroxide

FeO

↓

iron(II)oxide

الأقل

$K_2O + H_2O \rightarrow 2KOH$

Theoretical yield in mole → KOH

if 4g K_2O + 5g H_2O

mole كم مول

$K_2O = 0.04$ mol.

$H_2O = 0.277$

1 → 0.277 H_2O

2 → ☐ KOH

0.554 mol KOH

نأخذ الأصغر دائماً

كم لدينا

1 → 0.042 K_2O

2 → ☐ KOH

KOH

0.084 mol

Limiting reactant الأقل هو

Theoretical yield

Compare the amount of produ

" Prod

Depending on CH_4 amount

Eq.	CH_4	⟶	CO_2
Ratio	1		1

Question No. 23

What is the maximum number of double bonds that a hydrogen atom can form?

- 0
- 3
- 2
- 1

Question No. 12

How many grams of PCl_5 could be produced when 93 grams of P completely react with Cl_2 according to the reaction?

$$2\,P + 5\,Cl_2 \rightarrow 2\,PCl_5$$

- 112 g
- 625 g
- 133 g
- 243 g

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Question No. 21

In the following equation identify the Brønsted-Lowry base:

$NH_3 + HCN \rightarrow NH_4^+ + CN^-$

- NH_3
- HCN
- NH_4^+
- CN^-

Question No. 13

Determine the limiting reactant (LR) and the theoretical yield (in g) of iron (Fe) can be formed from 28.65 g Fe_2O_3 and 10.0 g Al according to the following equa

$$Fe_2O_3 + 2\,Al \rightarrow Al_2O_3 + 2\,Fe$$

- Al, 19.99 g Fe.
- Fe_2O_3, 20.7 g Fe.
- Al, 20.7 g Fe.
- Fe_2O_3, 19.99 g Fe.

Save & Next حفظ والتالي

Question No. 13

In the reaction below, what is the theoretical yield in grams for B_2H_6 when 6 moles of BF_3 react with 5 moles of NaH?

$$8\ BF_3 + 6\ NaH \rightarrow 6\ NaBF_4 + B_2H_6$$

- 25 g
- 21 g
- 17 g
- 13 g

Save & Next

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Che

Question No. 19

Which of the following is true before a reaction reaches chemical equilibrium?

- The rates of the forward and reverse reactions are decreasing.
- The rate of the forward reaction is decreasing, and the rate of the reverse reaction is increasing.
- The rate of the forward reaction is increasing, and the rate of the reverse reaction is decreasing.
- The rates of the forward and reverse reactions are increasing.

Question No. 16

In the chemical reaction below: what is oxidized and what is reduced in the following reaction?

$$2Al + 3Br_2 \rightarrow 2AlBr_3$$

- Al is oxidized and Br_2 is reduced.
- $AlBr_3$ is reduced and Br_2 is oxidized.
- Al is reduced and Br_2 is oxidized.
- $AlBr_3$ is reduced and Al is oxidized.

Question No. 16

Choose the best classification of the reaction represented by the following equation:

$$2Fe^{3+}(aq) + Fe(s) \rightarrow 3Fe^{2+}(aq)$$

- acid-base
- precipitation
- Oxidation-reduction
- combustion

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Question No. 23

Which of the following is true if the hydronium ion concentration of an aqueous solution decreases?

- pH decreases
- pH increases
- Kw increases
- Kw decreases

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Question No. 9

An ionic compound

- has a net negative charge.
- contains only cations.
- has a net positive charge.
- has a net charge of zero.

Save & Next जतन व पुढे

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Question No. 6

Which of the following is a molecular compound?

- $NaNO_3$
- KI
- CH_2Cl_2
- $CuCl_2$

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Question No. 5

Calculate the mass of 500 atoms of iron (Fe).

- 56 g Fe
- 4.64×10^{-20} g Fe
- 6.02×10^{23} g Fe
- 1.22 g Fe

Question No. 21

0.100 mole of lithium weighs

- 3.00 g.
- 0.694 g.
- 0.300 g.
- 6.94 g.

Chemistr

Question No. 11

The name of the chemical compound $MgSO_4$ is:

- magnesium(II) sulfate
- magnesium sulfate
- magnesium(II) sulfite
- magnesium sulfite

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Question No. 13

In the reaction below, what is the theoretical yield in moles for LiOH when 6 grams of Li_2O react with 7 grams of H_2O?

$$Li_2O + H_2O \rightarrow 2LiOH$$

- 0.8 mol
- 0.6 mol
- 1.0 mol
- 0.4 mol

Save & Next جمع رقلی

MACL OLS

Chemis

Question No. 7

What is the coefficient of carbon dioxide after balancing the following equation?

$$\_KHCO_{3(s)} \xrightarrow{\Delta} \_K_2CO_{3(s)} + \_H_2O_{(g)} + \_CO_{2(g)}$$

- 1
- 2
- 4
- 3

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Question No. 24

The compound AlF_3 can be described as a(n)

- Arrhenius acid.
- Brønsted-Lowry acid.
- Lewis base.
- Lewis acid.

Save & Next जतन व पुढील

Question No. 3

How many molecules are in 237 g (about a cup) of water?

- 6.02×10^{23}
- 4267
- 7.93×10^{24}
- 13.1

Save & Next حفظ و التالي

Question No. 4

The nucleus of an atom consists mainly of

- protons and neutrons.
- protons and electrons.
- protons, neutrons, and electrons.
- neutrons and electrons.

Question No. 4

The nucleus of an atom consists mainly of

- protons and neutrons.
- protons and electrons.
- protons, neutrons, and electrons.
- neutrons and electrons.

Save & Next حفظ والتالي

Question No. 21

In the following equation identify the Brønsted-Lowry acid:

$$NH_3 + HCN \rightarrow NH_4^+ + CN^-$$

- CN^-
- NH_3
- HCN
- NH_4^+

Question No. 6

One of the following exists as a molecular compound.

- $CHCl_3$
- NaCl
- H_2
- O_2

Question No. 1

Only two electrons, with opposing spins, are allowed in each orbital is known as the

- Hund's rule.
- Heisenberg uncertainty principle.
- Aufbau principle.
- Pauli exclusion principle.

Save & Next جतन र अर्को

MKCL OES
Online Evaluation System

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Question No. 19

Which of the following is true before a reaction reaches chemical equilibrium?

- The rates of the forward and reverse reactions are decreasing.
- The rate of the forward reaction is decreasing, and the rate of the reverse reaction is increasing.
- The rate of the forward reaction is increasing, and the rate of the reverse reaction is decreasing.
- The rates of the forward and reverse reactions are increasing.

Next

Question No. 15

Identify acetic acid.

- strong electrolyte, strong acid
- weak electrolyte, weak acid
- weak electrolyte, strong acid
- strong electrolyte, weak acid

Save & Next जतन व पुढील

MKCL OES

Question No. 19

Which statement about diluted solutions is false? When a solution is diluted

- the number of moles of solute remains unchanged.
- the molarity of the solution decreases.
- the concentration of the solution decreases.
- the volume of solvent remain unchanged.

Save & Next

Question No. 10

What is the mass percent of oxygen in K_2CO_3?

- 45.3%
- 8.7%
- 34.7%
- 54.7%

Save & Next

Question No. 1

Which statement about an atom is false?

- The volume occupied by electrons is referred to as an electron cloud.
- The nucleus accounts for a small portion of the mass of an atom.
- The nucleus is the center region of an atom.
- The space occupied by the electrons is primarily empty.

Question No. 18

In a solution, the solvent is _____.

- the substance present in the greatest amount
- always water
- substance present in a small amount
- always a solid

Question No. 25

Which of the following is true before a reaction reaches chemical equilibrium?

- The amount of reactants and products are equal.
- The amount of reactants and products are constant.
- The amount of reactants is decreasing.
- The amount of reactants is increasing.

Question No. 5

Of the elements: B, C, F and Li. The element with the least metallic character is

- F
- C
- Li
- B

Save & Next جتسب رلقاتلي

Question No. 17

How many covalent bonds will a nitrogen atom normally make?

- 3
- 2
- 4
- 1

Save & Next जतन व पुढील

Question No. 11

The name of the chemical compound $MgSO_4$ is:

- magnesium sulfate
- magnesium(II) sulfite
- magnesium sulfite
- magnesium(II) sulfate

Save & Next جفظ و التالي

Question No. 25

What is the total number of valence electrons in the molecule of N_2?

- 10
- 2
- 8
- 14

Save & Next حفظ والتالي

Question No. 2

Valence electrons are electrons located

- in the innermost energy level of an atom.
- in the outermost energy level of an atom.
- in the nucleus of an atom.
- in the first three shells of an atom.

Save & Next جतन करा पुढे

Question No. 21

According to the Arrhenius concept, if KOH were dissolved in water, it would act as

- a proton acceptor.
- an acid.
- a base.
- an electron pair acceptor.

Question No. 14

Calculate the volume (in mL) of a 2.75 M solution that must be used to make 1.25 L of a 0.150 M solution.

- 0.0330 mL
- 68.2 mL
- 33.0 mL
- 0.0682 mL

Question No. 12

How many grams of $AlCl_3$ could be produced when 1.5 moles of Cl_2 completely react with aluminum according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 333 g
- 267 g
- 533 g
- 134 g

Question No. 13

In the reaction below, what is the theoretical yield in grams for B_2H_6 when 5 moles of BF_3 react with 4 moles of NaH?

$$8BF_3 + 6NaH \rightarrow 6NaBF4 + B_2H_6$$

- 17.3 g
- 12.5 g
- 28.5 g
- 9.5 g

MKCL OES

Question No. 7

Which group of elements is mostly found as diatomic molecules?

- noble gases
- alkaline earth metals
- halogens
- alkali metals

Next

Question No. 18

Which of the following is the electron dot formula (Lewis structure) for an atom of fluorine?

(a) F· (b) ·F· (c) ·F· (d) :F:

(c)
(b)
(d)
(a)

Question No. 6

Which of the following is a molecular compound?

- $NaNO_3$
- KI
- CH_2Cl_2
- $CuCl_2$

Save & Next

Question No. 16

What is the oxidation number of manganese in MnO_2?

- +2
- +1
- +4
- 0

Save & Next

Question No. 1

The existence of electrons in atoms of all elements was demonstrated by

- Dalton's atomic experiment
- Thomson's cathode ray tube experiment
- Millikan's oil drop experiment
- Rutherford's gold foil experiment

Save & Next جطر وتالى

Question No. 7

Which of the following is a general guideline for balancing an equation?

- Balance polyatomic ions as a single unit.
- Check each reactant and product to verify the coefficients.
- All are correct
- Write correct formulas for reactants and products.

Save & Next سेव्ह व पुढचे

Question No. 23

Which of the following is true if the hydronium ion concentration of an aqueous solution increases?

- pH decreases
- K_w decreases
- K_w increases
- pH increases

Save & Next حفظ والتالي

Question No. 7

Which of the following is a general guideline for balancing an equation?

- Balance polyatomic ions as a single unit.
- Check each reactant and product to verify the coefficients.
- All are correct
- Write correct formulas for reactants and products.

Save & Next جतन व पुढील

Question No. 4

Which of these elements is most likely to be a good conductor of electricity?

- He
- S
- Fe
- N

ave & Next حفظ والتالي

Question No. 4

The number of protons in the nucleus of an atom

- is the same for all isotopes of an element.
- identifies the atom as a particular element.
- All the answers are correct
- is called the atomic number.

Save & Next जतन व पुढील

Question No. 12

How many grams of $AlCl_3$ could be produced when 54 grams of Al completely reac
with Cl_2 according to the reaction?

$$2\ Al + 3\ Cl_2 \rightarrow 2\ AlCl_3$$

- 267 g
- 342 g
- 133 g
- 112 g

Question No. 11

The name of the chemical compound $BaCO_3$ is:

- Barium carbonate
- Barium(II) carbonate
- Barium(III) carbonate
- Barium(I) carbonate

Question No. 1

According to Hund's Rule

- no two electrons in the same atom can have the same four quantum numbers.
- electrons fill orbitals of the same energy singly and pair up only after the orbitals are all half filled.
- electrons found in the same orbital must have the same spin.
- electrons pair first before filling other orbitals with same energy

Question No. 12

How many grams of $AlCl_3$ could be produced when 5 moles of Cl_2 completely rea with aluminum according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 622 g
- 733 g
- 833 g
- 445 g

Save & Next حفظ والتالى

CL OES

Question No. 17

All of the following compounds has a covalent bond except.

- $AlCl_3$
- BrF
- ICl
- HBr

Question No. 10

What is the mass percent of oxygen in K_2CO_3?

- 45.3%
- 8.7%
- 34.7%
- 54.7%

Save & Next

OES

Question No. 20

Any reaction that release 150 kcal of energy can be classified as _____.

- activated
- oxidation
- exothermic
- endothermic

Question No. 13

In the reaction below, what is the theoretical yield in grams for B_2H_6 when 5 moles of BF_3 react with 4 moles of NaH?

$$8\,BF_3 + 6\,NaH \rightarrow 6\,NaBF4 + B_2H_6$$

- 17.3 g
- 12.5 g
- 28.5 g
- 9.5 g

Question No. 3

How many moles of water, H_2O, are present in 75.0 g H_2O?

- 4.41 moles
- 4.17 moles
- 7.50 moles
- 75.0 moles

Question No. 8

What is the molecular formula of a compound that has a molar mass of 444.6 g/mol and its empirical formula is P_2S_5?

- P_8S_{20}
- P_6S_{15}
- $P_{10}S_{25}$
- P_4S_{10}

Question No. 5

If 2 moles of an element are weighing 54 g, this element is most likely:

- Manganese with a molar mass of 55.0
- Aluminum with a molar mass of 27.0
- Phosphorous with a molar mass of 31.0
- Silver with a molar mass of 108.0

Save & Next حفظ والتالي

Question No. 20

Refer to the reaction shown below. Increasing the pressure will _____.

$$2H_2S\,(g) + 3O_2\,(g) \rightleftharpoons 2SO_2\,(g) + 2H_2O\,(g)$$

- cannot be determined, since the temperature is unknown
- shift the reaction to the left
- have no effect
- shift the reaction to the right

Save & Next حفظ والتالي

MKCL OES

Question No. 4

How many neutrons are there in an atom of lead whose mass number is 207?

- 82
- 125
- 290
- 207

Question No. 2

Which of the following is a characteristic of the modern periodic table?

- The elements in each group have similar chemical properties.
- A period is a column on the periodic table.
- The elements in each group have different chemical properties.
- A group is a horizontal row on the periodic table.

Question No. 22

In a *basic* solution, pH is _____ and $[H_3O^+]$ is _____.

- $< 7, > 1 \times 10^{-7}$ M
- $= 7, 1 \times 10^{-7}$ M
- $< 7, < 1 \times 10^{-7}$ M
- $> 7, < 1 \times 10^{-7}$ M

Question No. 5

Of the elements: B, C, F and Li. The element with the least metallic character is

- F
- C
- Li
- B

Save & Next जतन व पुढील

Question No. 20

Which of the changes listed below will shift the equilibrium position to the *left* fo following reversible reaction?

$$CO(g) + H_2O(g) \rightleftarrows CO_2(g) + H_2(g) + \text{heat}$$

- An increase of temperature
- A decrease of $[CO_2]$
- A decrease of volume
- An increase of $[H_2O]$

Question No. 14

Calculate the volume (in mL) of a 2.75 M solution that must be used to make 1.25 L of a 0.150 M solution.

- 0.0330 mL
- 68.2 mL
- 33.0 mL
- 0.0682 mL

Question No. 11

The name of the chemical compound $Al(NO_3)_3$ is:

- aluminum(III) nitrate
- aluminum(II) nitrate
- aluminum(I) nitrate
- aluminum nitrate

Question No. 1

The number of electrons in the outer energy level of a neutral atom of phosphorous is

- 2
- 8
- 3
- 5

MAGOOS

Chemis

Question No. 7

What is the coefficient of carbon dioxide after balancing the following equation?

$$\_KHCO_3(s) \xrightarrow{\Delta} \_K_2CO_3(s) + \_H_2O(g) + \_CO_2(g)$$

- 1
- 2
- 4
- 3

Question No. 8

Nitrogen and oxygen form an extensive series of oxides with the general formula N_xO_y. What is the empirical formula for an oxide that contains 63.65% nitrogen?

- NO_2
- NO
- N_2O_3
- N_2O

Question No. 12

When ..... react with ..... they form a (an) .... compound.

- Metals, Nonmetals, Ionic
- Nonmetals, Nonmetals, Ionic
- Metals, Metals, Molecular
- Metals, Nonmetals, Molecular

Question No. 3

The elements lithium, beryllium, and boron _____

- are isotopes of each other
- are in the same period
- have the same number of neutrons
- are in the same group

Save & Next حفظ و التالي

Question No. 20

Which of the following compounds gives a non electrolyte aqueous solution?

- Na_2CO_3
- H_2CO_3
- CCl_4
- H_3PO_4

Save & Next جمع وتالي

Question No. 9

The chemical formula of the compound formed between cesium and fluorine is:

- Cs_2F
- CsF
- CsF_3
- CsF_2

Save & Next

MKCL OES

Question No. 6

Which of the following is a molecular compound?

- CuF_2
- P_2O_4
- RbF
- $NaNO_3$

stion No. 7

What is the coefficient of carbon dioxide after balancing the following equation?

$$\_Cr_2(CO_3)_3(s) \xrightarrow{\Delta} \_Cr_2O_3(s) + \_CO_2(g)$$

3
2
1
4

Next التالي

Question No. 1

Each electron occupies the lowest energy orbital available is known as the

- Heisenberg uncertainty principle.
- Hund's rule.
- Aufbau principle.
- Pauli exclusion principle.

Question No. 5

Calculate the mass of 500 atoms of iron (Fe).

- 4.64×10^{-20} g Fe
- 56 g Fe
- 1.22 g Fe
- 6.02×10^{23} g Fe

Question No. 6

The atomic size (radius) of atoms

- does not change going down with in a group.
- decreases going down within a group.
- increases going across a period.
- increases going down within a group.

Question No. 9

The chemical formula of the compound formed between barium and sulfur is

- BaS_2
- Ba_2S
- Ba_2S_3
- BaS

Question No. 16

How many moles of CO_2 could be produced when 3 moles of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3\ O_2 \rightarrow 2\ CO_2 + 3\ H_2O$$

- 6 mol
- 8 mol
- 2 mol
- 4 mol

Question No. 7

Which family is most likely to form diatomic molecules?

- Group VII-A
- Group VIII-A
- Group V-A
- Group VI-A

Question No. 5

The molecular formula of aspirin is $C_9H_8O_4$. How many aspirin molecules are present in one 500-milligram tablet?

- 1.67×10^{21} molecules
- 2.77×10^{-3} molecules
- 2.77 molecules
- 1.67×10^{24} molecules

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Question No. 7

Which group of elements is mostly found as diatomic molecules?

- noble gases
- alkaline earth metals
- halogens
- alkali metals

Next

Question No. 19

What volume of 12 M acid must be diluted with distilled water to prepare 5.0 L of 0.10 M acid?

- 42 mL
- 60 mL
- 0.042 mL
- 6 mL

Question No. 22

Which one of the following equations describes a *redox* reaction?

- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Save & Next

Question No. 5

Ionization energy is

- the energy an ion acquires from an electron.
- higher for potassium than for lithium.
- the energy needed to remove the least tightly bound electron.
- highest for metals in Group 1A(1).

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 25

The number of lone pairs in HCl is ---------.

- 2
- 3
- 0
- 1

Which of the following is an ionic compound?

- PCl_3
- CO_2
- CCl_4
- LiBr

Question No. 8

What is the empirical formula of the compound that has a composition by mass of 34.6% C, 3.9% H and 61.5% O?

- $C_3H_4O_4$
- CH_2O_3
- CH_2O
- CHO

Instructions

Question No. 12

Calcium carbide (CaC_2) reacts with water to produce acetylene (C_2H_2):

$$CaC_2\,(s) + 2\,H_2O\,(g) \rightarrow Ca(OH)_2\,(s) + C_2H_2\,(g)$$

The complete reaction of 57.4 g of CaC_2 requires consumption of _____

- 0.895
- 1.79
- 64.1
- 32.3

Save & Next حفظ والتالي

P Compaq LE1711

Question No. 2

Which describes the valance electrons of calcium?

- $4s^2d^1$
- $4s^1$
- $4s^2$
- $4s^0$

Save & Next حفظ والتالي

The compound AlF_3 can be described as a(n)

- Lewis acid.
- Brønsted-Lowry acid.
- Lewis base.
- Arrhenius acid.

Question No. 22

What substance is the reducing agent in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Zn^{2+}
- Zn
- Cu^{2+}
- Cu

ve & Next

Question No. 22

What substance is oxidized in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Cu^{2+}
- Zn
- Zn^{2+}
- Cu

Save & Next حفظ والتالى

Question No. 11

The name of the chemical compound $MgSO_4$ is:

- magnesium(II) sulfate
- magnesium sulfite
- magnesium(II) sulfite
- magnesium sulfate

Save & Next جمع و التالي

Question No. 24

Lewis Acid is defined as

- an electron pair acceptor
- an electron pair donor
- Produces OH^- ions in an aqueous solution
- a proton acceptor

Save & Next حفظ و تالي

Question No. 8

How many iron atoms are contained in 354 g of iron?

- 2.62×10^{25} Fe atoms
- 2.13×10^{26} Fe atoms
- 4.69×10^{24} Fe atoms
- 3.82×10^{24} Fe atoms

Save & Next حفظ والتالي

Question No. 22

What substance is the oxidizing agent in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Cu2+
- Zn2+
- Zn
- Cu

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 7

What is the coefficient of oxygen gas after balancing the following eq

$$\_\_LiNO_3(s) \xrightarrow{\Delta} \_\_LiNO_2(s) + \_\_O_2(g)$$

- 3
- 2
- 4
- 1

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 4 mol
- 6 mol
- 2 mol
- 8 mol

Save & Next حفظ والتالي

Question No. 22

What substance is the reducing agent in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Zn^{2+}
- Zn
- Cu^{2+}
- Cu

ve & Next

Question No. 3

How many moles of water, H_2O, are present in 75.0 g H_2O?

- 75.0 moles
- 4.17 moles
- 4.41 moles
- 7.50 moles

Save & Next حفظ والتالي

Question No. 5

If 2 moles of an element are weighing 54 g, this element is most likely:

- Silver with a molar mass of 108.0
- Aluminum with a molar mass of 27.0
- Manganese with a molar mass of 55.0
- Phosphorous with a molar mass of 31.0

Question No. 5

How many phosphorus atoms are contained in 158 kg of phosphorus?

- 2.95×10^{27} phosphorus atoms
- 1.18×10^{24} phosphorus atoms
- 3.25×10^{28} phosphorus atoms
- 3.07×10^{27} phosphorus atoms

MKCL OES

Question No. 1

Who formulated the modern atomic theory?

- Nivaldo Tro
- John Dalton
- Antoine Lavoisier
- John Dalton and Antoine Lavoisier

Save & Next

Question No. 23

In an *acidic* solution, pH is _____ and $[H_3O^+]$ is _____.

- $< 7, < 1 \times 10^{-7}$ M
- $< 7, > 1 \times 10^{-7}$ M
- $= 7, 1 \times 10^{-7}$ M
- $> 7, < 1 \times 10^{-7}$ M

Question No. 20

The ionization energy of silicon is lower than the ionization energy for _____.

- magnesium
- aluminum
- sodium
- phosphorus

TOSHIBA

MKCL OES

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Question No. 8

For the following reaction, what is the correct coefficient for the H_2?

$$Al + HCl \rightarrow AlCl_3 + H_2$$

- 4
- 1
- 3
- 2

Save & Next

HP L1710

Question No. 15

The charge of nitrate ion is:

- 2-
- 2+
- 1-
- 1+

Question No. 22

Which of the following is true if the pH of a solution changes from 7 to 5?

- $[H^+]$ increases
- K_w decreases
- $[H^+]$ decreases
- K_w increases

Save & Next

HP Compaq LE1711

Question No. 8

What coefficient is placed in front of O_2 to complete the balancing of the following equation?

$$C_5H_8 + ?\,O_2 \rightarrow 5CO_2 + 4H_2O$$

- 3
- 7
- 5
- 1

Save & Next محفظ والتالی

Question No. 18

The number of lone pairs in HCl is --------.

- 0
- 3
- 1
- 2

Save & Next حفظ والتالي

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 6 mol
- 2 mol
- 4 mol
- 8 mol

Save & Next محفظ والتالي

Question No. 5

Which of these elements has the highest electron affinity?

- aluminum
- sulfur
- magnesium
- silicon

Save & Next حفظ والتالي

Chemistry

Question No. 13

What is the mass percent of potassium in K_2CO_3?

- 34.7%
- 45.3%
- 54.7%
- 56.6%

Save & Next حفظ والتالي

Question No. 22

What term describes a reactant that gains electrons from another reactant?

- oxidizing agent
- precipitate
- base
- reducing agent

MKCL OES

Question No. 17

Short bonds are usually _____ while the long bonds are _____

- Strong, weak
- Strong, strong
- Weak, strong
- Weak, weak

Save & Next محفوظ کریں

HP Compaq LE1711

Question No. 22

In an oxidation-reduction reaction, the substance reduced always

- gives up hydrogen atoms.
- shows a loss of electrons.
- shows a gain of electrons.
- takes on oxygen atoms.

Chemistry_Sem1_ENH_2016-17

Question No. 22

Which of the following solutions is acidic?

- $[H_3O^+] = 1.00 \times 10^{-9}$
- $[H_3O^+] = 1.00 \times 10^{-11}$
- $[H_3O^+] = 1.00 \times 10^{-3}$
- $[H_3O^+] = 1.00 \times 10^{-8}$

Save & Next

HP Compaq LE1711

Question No. 2

The element in this list with chemical properties similar to magnesium is

- carbon.
- boron.
- strontium.
- sodium.

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 16

How many moles of CO_2 could be produced when 1.8×10^{24} molecules of C_2H_6O completely react with oxygen gas according to the reaction?

$$C_2H_6O + 3O_2 \rightarrow 2CO_2 + 3H_2O$$

- 4 mol
- 8 mol
- 6 mol
- 2 mol

Question No. 24

Which of the following elements has the lowest electronegativity?

- chlorine
- bromine
- fluorine
- iodine

Question No. 1

What is the element with the electron configuration $1s^2 2s^2 2p^6 3s^2 3p^5$?

- Be
- S
- Cl
- F

Save & Next حفظ و التالي

Question No. 5

The molecular formula of aspirin is $C_9H_8O_4$. How many aspirin molecules are present in one 500-milligram tablet?

- 1.67×10^{21} molecules
- 2.77×10^{-3} molecules
- 2.77 molecules
- 1.67×10^{24} molecules

Question No. 20

Which of the following compounds gives a strong electrolyte aqueous solution?

- Na_2CO_3
- H_3PO_4
- $C_6H_{12}O_6$
- H_2CO_3

Save & Next جمع والتالي

Question No. 8

For the following reaction, what is the correct coefficient for the H_2?

$$Al + HCl \rightarrow AlCl_3 + H_2$$

- 4
- 1
- 3
- 2

Save & Next حفظ وتالي

MKCL OES

Question No. 4

Predict the charge that phosphorous ion would have.

- 3+
- 5+
- 3-
- 5-

Save & Next जतन व पुढील

Question No. 3

What is the mass of 0.250 mol of NH_3?

- 4.25 g
- 34 g
- 3.4 g
- 7.5 g

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 20

Which of the following compounds gives a non electrolyte aqueous solution?

- $CaCl_2$
- H_2CO_3
- CH_4
- H_3PO_4

Question No. 9

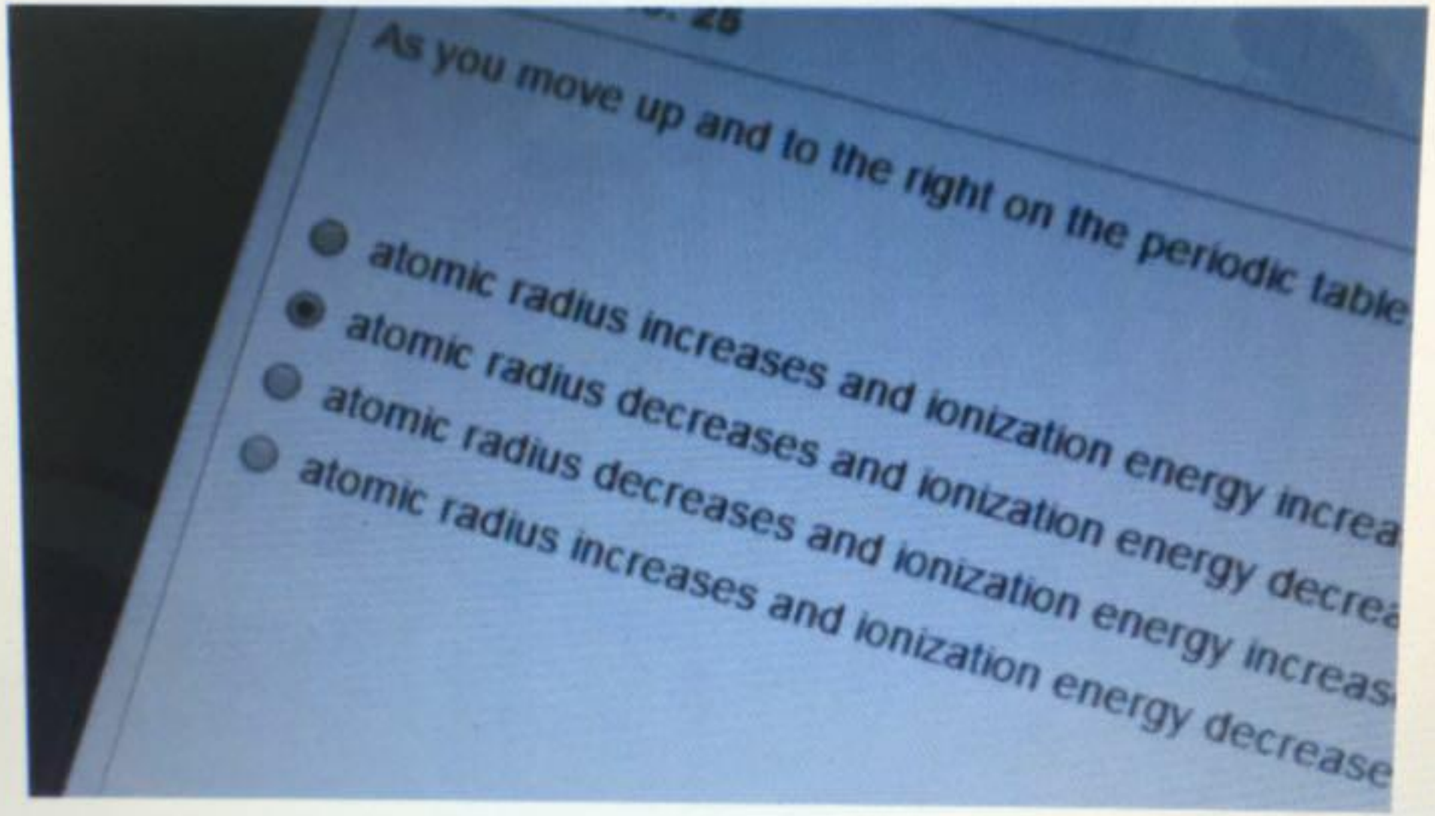
Covalent bonding is a

- sharing of electrons
- gain of electrons.
- loss of electrons.
- transfer of electrons.

Question No. 11

The name of the chemical compound $Cu(NO_3)_2$ is:

- copper(II) nitrate
- copper(I) nitrate
- copper(III) nitrate
- copper nitrate


As you move up and to the right on the periodic table
atomic radius increases and ionization energy increa
atomic radius decreases and ionization energy decrea
atomic radius decreases and ionization energy increas
atomic radius increases and ionization energy decrease

Question No. 18

If 3.0 moles of KI is dissolved in enough water to make 12.0 L of solution, what is the molarity of this solution?

- 0.25 M
- 4.0 M
- 0.5 M
- 0.75 M

Question No. 5

The ionization energy of beryllium is higher than the ionization energy for ____

- lithium
- carbon
- nitrogen
- boron

MKCL OES

Chemist

Question No. 14

If 4.0 moles of KBr is dissolved in enough water to make 12.0 L of solution, what is the molarity

- 0.25 M
- 0.33 M
- 0.75 M
- 4.0 M

Save & Next حفظ والتالي

MKCL OES

Question No. 1

Which statement below accurately describes the contributions of Thomson?

- Ancient Greek philosopher who proposed that matter was continuous
- Discovered the existence of electrons
- Created the modern periodic table
- Proposed the modern Atomic Theory

Save & Next حفظ والتالي

MKCL OES
Online Evaluation System

Question No. 14

The most correct name for the compound SBr_6 is:

- monosulfur heptabromide
- sulfur bromide
- monosulfur hexabromide
- sulfur hexabromide

Question No. 3

How many molecules are in 237 g (about a cup) of water?

- 7.93×10^{24}
- 4267
- 6.02×10^{23}
- 13.1

Question No. 20

Which of the following compounds will form a solution with water that is a good conductor of electricity?

- CCl_4
- NH_3
- HNO_3
- CO_2

No. 20

Consider the following reaction at equilibrium. What effect will increase the pressure o the reaction mixture have on the system?

$$2\,H_2S_{(g)} + 3\,O_{2(g)} \rightleftarrows 2\,H_2O_{(g)} + 2\,SO_{2(g)}$$

- The reaction will shift to the right in the direction of products.
- No effect will be observed.
- The equilibrium constant will decrease
- The reaction will shift to the left in the direction of the reactants.

Question No. 3

How many moles of water, H_2O, are present in 75.0 g H_2O?

- 75.0 moles
- 7.50 moles
- 4.17 moles
- 4.41 moles

Question No. 13

When 10 moles of V_2O_5 are mixed with 10 moles of Ca, which is the limiting reactant according to the above equation?

- V_2O_5
- CaO
- Ca
- V

Save & Next حفظ والتالي

Question No. 22

Which one of the following equations describes a *redox* reaction?

- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Question No. 7

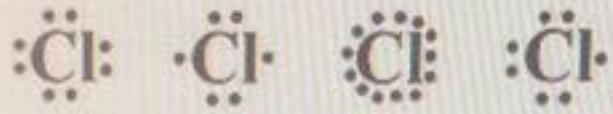
One of the following elements exists as a diatomic molecule:

- chlorine
- iron
- argon
- neon

Save & Next حفظ والتالي

Question No. 18

Which of the following is the correct electron dot structure for chlorine (atomic no. = 17)?



a b c d

- a
- d
- b
- c

Save & Next

HP Compaq LE1711

Question No. 12

Calcium carbide (CaC_2) reacts with water to produce acetylene (C_2H_2):

$$CaC_2\,(s) + 2\,H_2O\,(g) \rightarrow Ca(OH)_2\,(s) + C_2H_2\,(g)$$

The complete reaction of 57.4 g of CaC_2 requires consumption of _____ g of H_2O.

- 0.895
- 1.79
- 64.1
- 32.3

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 24

Which of the following elements has the highest electronegativity?

- Si
- Mg
- S
- Cl

Save & Next حفظ والتالي

Question No. 17

What is the percent yield for a reaction if its theoretical yield is 135 g and its actual yield is 72 g?

- 53%
- 72%
- 86%
- 63%

e of KF in enough water to give a final volume of 1030 mL. What is the molarity of the solution

لازم تحول باللتر

$V = 1030\ mL \xrightarrow{\times 10^{-3}} L$

الحجم باللتر

$V = 1030 \times 10^{-3} = 1.030$

$$M = \frac{\text{عدد المولات المذابة}}{\text{حجم المحلول باللتر}}$$

$$M = \frac{2.68}{1.030}$$

$$M = 2.601\ M$$

Question No. 21

In the following equation identify the Brønsted-Lowry conjugate base:

$$NH_3 + HCN \rightarrow NH_4^+ + CN^-$$

- CN^-
- HCN
- NH_4^+
- NH_3

Save & Next جمع و اگلی

Question No. 23

Which molecule contains the strongest carbon-carbon bond?

- $F_2C{=}CF_2$
- $HC{\equiv}CH$
- $H_3C{-}CH_3$
- $H_2C{=}CH_2$

MKCL OES

Question No. 7

One of the following elements exists as a diatomic molecule:

- chlorine
- iron
- argon
- neon

Save & Next

HCO

ry_Quiz-2_Sem1_2016-17

Question No. 21

According to the Arrhenius concept, if K[illegible]H were dissolved in water, it would act as

- a proton acceptor.
- an acid.
- a base.
- an electron pair acceptor.

Question No. 21

According to the Arrhenius concept, if KOH were dissolved in water, it would act as

- a proton acceptor.
- an acid.
- a base.
- an electron pair acceptor.

Question No. 16

The combustion of propane (C_3H_8) produces CO_2 and H_2O:

$$C_3H_8\,(g) + 5\,O_2\,(g) \rightarrow 3CO_2\,(g) + 4\,H_2O\,(g)$$

The reaction of 5.5 mol of O_2 will produce _____ mol of H_2O.

- 5
- 2
- 4.4
- 5.5

Save & Next حفظ والتالي

Question No. 25

Identify the conjugate base of HPO_4^{2-} in the reaction

$$HCO_3^- + HPO_4^{2-} \leftrightarrow H_2CO_3 + PO_4^{3-}$$

- H_2O
- PO_4^{3-}
- HCO_3^-
- H_2CO_3

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 24

Which of the following has the greatest number of nonbonding pairs of electrons?

- He
- F
- H
- C

Question No. 1

What does "X" represent in the following symbol?

$$^{80}_{35}X$$

- bromine
- chlorine
- scandium
- iron

Save & Next جतन व पुढे

Question No. 22

What substance is the oxidizing agent in the following redox reaction?

$$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$$

- Cu2+
- Zn2+
- Zn
- Cu

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 14

The most correct name for the compound N_2O_3 is:

- nitrogen oxide
- dinitrogen trioxide
- dinitrogen tetraoxide
- mononitrogen trioxide

Question No. 13

What is the molar mass of copper(II) sulfate, $CuSO_4$?

- 111.6 g/mol
- 63.60 g/mol
- 159.6 g/mol
- 16.00 g/mol

Question No. 13

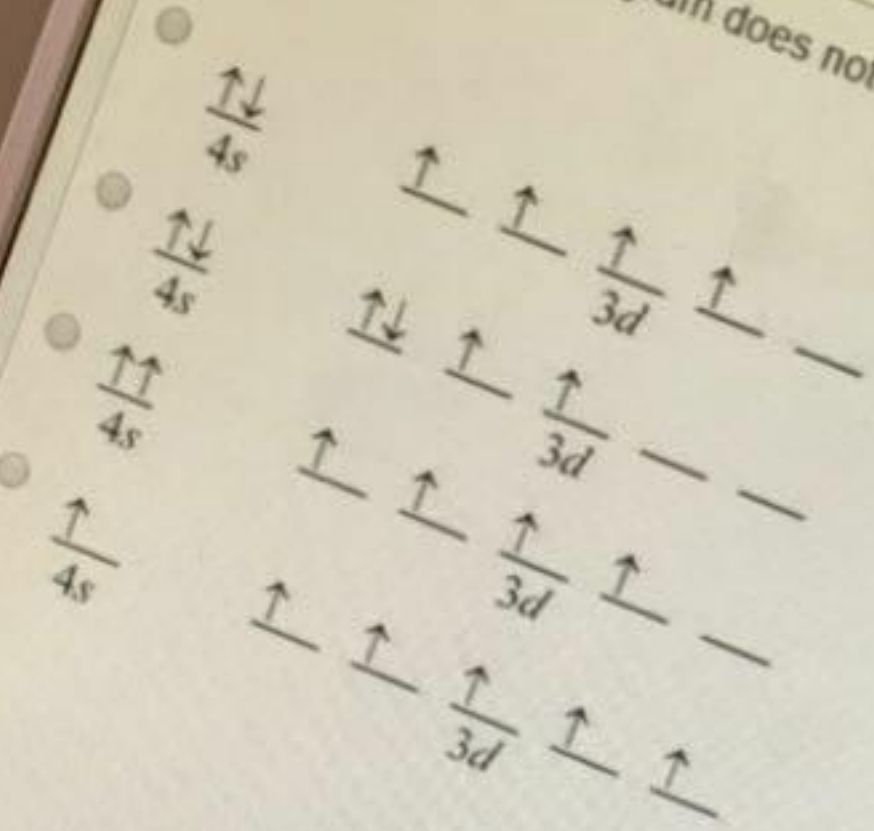
When 10 moles of V_2O_5 are mixed with 10 moles of Ca, which is the limiting reactant according to the above equation?

- V_2O_5
- CaO
- Ca
- V

Save & Next حفظ والتالي

Question No. 2

Which orbital-filling diagram does not obey Hund's rule?



Next

Question No. 22

Which one of the following equations describes a *redox* reaction?

- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Save & Next

Question No. 22

Which one of the following equations describes a *redox* reaction?

- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

How many grams of $2AlCl_3$ produce 5 mol of Cl_2?

$$2Al + 3Cl_2 \longrightarrow 2AlCl_3$$

Question No. 9

What is the chemical formula for the binary compound composed of Li^+ and O^{2-} ions?

- LiO
- Li_2O_2
- Li_2O
- LiO_2

Save & Next جतन र अगला

Question No. 16

Choose the best classification of the reaction represented by the following equation:

$$2Fe^{3+}(aq) + Fe(s) \rightarrow 3Fe^{2+}(aq)$$

- Oxidation-reduction
- acid-base
- precipitation
- combustion

Question No. 9

A covalent bond is best described as

- a bond between a metal and a nonmetal.
- the transfer of electrons.
- a bond between a metal and a polyatomic ion.
- the sharing of electrons between atoms.

MKCL OES

Question No. 1

Which statement below accurately describes the contributions of Thomson?

- Ancient Greek philosopher who proposed that matter was continuous
- Discovered the existence of electrons
- Created the modern periodic table
- Proposed the modern Atomic Theory

Save & Next حفظ والتالي

Question No. 16

The substance that causes the oxidation of another substance is called

- anode
- reducing agent
- cathode
- oxidizing agent

Save & Next جतन करके पुढील

MKCL OES

Question No. 2

Which of these resistors is closest in value to mega ohm?

- 1ohm
- 10ohm
- 1kohm
- 10kohm

Question No. 3

How many molecules are in 237 g (about a cup) of water?

- 7.93×10^{24}
- 4267
- 6.02×10^{23}
- 13.1

Question No. 7

Which family is most likely to form diatomic molecules?

- Group VII-A
- Group VIII-A
- Group V-A
- Group VI-A

Question No. 5

Calculate the mass of 500 atoms of iron (Fe).

- 56 g Fe
- 4.64×10^{-20} g Fe
- 6.02×10^{23} g Fe
- 1.22 g Fe

Question No. 22

What term describes a reactant that gains electrons from another reactant?

- oxidizing agent
- precipitate
- base
- reducing agent

Question No. 14

A solution is made by dissolving 2.68 mole of KF in enough water to give a final volume of 1030 mL. What is the molarity of the solution?

- 0.125 M
- 1.52 M
- 0.800 M
- 2.60 M

Save & Next حفظ و تالي

Compaq LE1711

Question No. 2

The maximum number of electrons that may occupy the fourth electron energy level is ____

- 32
- 2
- 8
- 18

CHEM 101 SUPPLEMENTAL INFORMATIO

$°C = \frac{(°F - 32)}{1.8}$	$°F = 1.8\,(°C) + 32$	$°C = K - 273$	
$M_1V_1 = M_2V_2$	$K_W = [H_3O^+][OH^-]$	$K_W = 1 \times 10^{-14}$	
. = Emp. Form. X n *olar mass* *m molar mass*	$\%\ yield = \frac{\text{actual yield}}{\text{theoretical yield}} \times 100$		n
$w = -P\Delta V$	$q = m \times C_s \times \Delta T$	1 L.atm = 101.3 J	

MKCL OES

Question No. 3

What is the mass of 0.250 mol of NH_3?

- 7.5 g
- 3.4 g
- 34 g
- 4.25 g

Question No. 25

The number of lone pairs in HCl is ---------.

- 2
- 3
- 0
- 1

Question No. 1

The charge of electron was established by

- Thomson's cathode ray tube experiment.
- Millikan's oil drop experiment.
- Rutherford's gold foil experiment.
- Dalton's atomic experiment

Question No. 10

Nitrogen and oxygen form an extensive series of oxides with the general formula N_xO_y. What is the empirical formula for an oxide that contains 63.65% nitrogen?

- N_2O
- N_2O_3
- NO_2
- NO

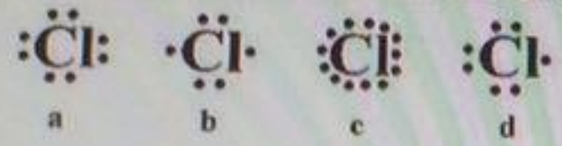
Question No. 4

Metalloids are located where on the periodic table?

- left side
- right side
- middle
- between metals and nonmetals

Question No. 18

Which of the following is the correct electron dot structure for chlorine (atomic no. = 17)?



- a
- d
- b
- c

Question No. 4

Metals are located where on the periodic table?

- right side and middle
- right side
- left side and middle
- between metals and nonmetals

Question No. 8

The coefficients (a,b,c) needed to balance the equation below are:

$$a\,Li + b\,Cl_2 \rightarrow c\,LiCl$$

- (2,1,2)
- (1,2,1)
- (1,2,2)
- (2,2,1)

Question No. 19

Which of the following is true before a reaction reaches chemical equilibrium?

- The amount of reactants is decreasing.
- The amount of reactants and products are equal.
- The amount of reactants is increasing.
- The amount of reactants and products are constant.

Save & Next التالي

Question No. 19

Which of the following is true after a reaction reaches chemical equilibrium?

- The amount of products is increasing.
- The amount of reactants and products are constant.
- The amount of products is decreasing.
- The amount of reactants and products are equal.

Save & Next حفظ والتالي

Question No. 7

What is the coefficient for O_2 when the following combustion reaction is balanced?

$$\_\_\_ C_7H_{14} + \_\_\_ O_2 \rightarrow \_\_\_ CO_2 + \_\_\_ H_2O$$

- 10
- 21
- 11
- 42

Chemistry_Sem1_ENH_20

Question No. 1

When many orbitals that have same energy with electrons, fill them singly first, with parallel spins, is known as

- Aufbau principle
- Hund's rule
- Heisenberg uncertainty principle
- Pauli exclusion principle

Question No. 20

Refer to the reaction shown below. Adding H_2O to the reaction vessel will _____.

$$2H_2S\,(g) + 3O_2\,(g) \rightleftharpoons 2SO_2\,(g) + 2H_2O\,(g)$$

- have no effect
- cannot be determined, since the temperature is unknown
- shift the reaction to the right
- shift the reaction to the left

MKCL OES

Chemistry_Sem1_

Question No. 4

How many neutrons are there in an atom of lead whose mass number is 207?

- 207
- 290
- 125
- 82

Save & Next

Question No. 12

Under appropriate conditions, nitrogen and hydrogen undergo a combination reaction to yield ammonia:

$N_2\ (g) + 3\ H_2\ (g) \rightarrow 2NH_3\ (g)$

A 7.1-g sample of N_2 requires _____ g of H_2 for complete reaction.

- 0.76
- 0.51
- 1.2
- 1.5

Question No. 7

One of the following elements exists as a diatomic molecule:

- neon
- iron
- chlorine
- argon

Question No. 11

The name of the chemical compound NH_4OH is:

- ammonium(II) hydroxide
- ammonium(III) hydroxide
- ammonium hydroxide
- ammonium(I) hydroxide

Question No. 23

Which of the following is true if the hydronium ion concentration of an aqueous solution increases?

- K_w increases
- pH decreases
- K_w decreases
- pH increases

Question No. 8

What is the empirical formula of the compound that has a composition by mass of 84.2% C and 15.8% H?

- C_4H_9
- C_3H_9
- C_3H_8
- C_4H_{10}

Save & Next جمع وتالي

MKCL OES

Question No. 24

The compound AlF_3 can be described as a(n)

- Arrhenius acid.
- Brønsted-Lowry acid.
- Lewis base.
- Lewis acid.

Save & Next जतन व पुढील

Question No. 7

What is the coefficient of oxygen gas after balancing the following equation?

$$\_\_AgClO_3(s) \xrightarrow{\Delta} \_\_AgCl(s) + \_\_O_2(g)$$

- 3
- 4
- 2
- 1

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 12

How many grams of $AlCl_3$ could be produced when 3 mole of Al completely react with Cl_2 according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 133 g
- 400 g
- 266 g
- 67 g

Question No. 18

In a solution, the solvent is _____.

- the substance present in the greatest amount
- always water
- substance present in a small amount
- always a solid

Question No. 24

Lewis Acid is defined as

- a proton acceptor
- an electron pair donor
- an electron pair acceptor
- Produces OH^- ions in an aqueous solution

Save & Next حفظ والتالي

HP Compaq

Question No. 6

Which of the following is a molecular compound?

- P_2O_4
- RbF
- CuF_2
- $NaNO_3$

Save & Next

The combustion of propane (C_3H_8) produces CO_2 and H_2O:

$$C_3H_8\ (g) + 5\ O_2\ (g) \rightarrow 3CO_2\ (g) + 4\ H_2O\ (g)$$

The reaction of 5.5 mol of O_2 will produce _____ mol of H_2O.

- 5.5
- 4.4
- 2
- 5

Question No. 23

What is the $[H_3O^+]$ in a solution with $[OH^-] = 1 \times 10^{-12} M$?

- $1 \times 10^{-8} M$
- $1 \times 10^{2} M$
- $1 \times 10^{-2} M$
- $1 \times 10^{-12} M$

Question No. 16

Which one of the following equations describes a *redox* reaction?

- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Question No. 10

What is the mass percent of potassium in K_2CO_3?

- 45.3%
- 34.7%
- 56.6%
- 54.7%

حفظ والتالي Next

Question No. 24

The compound AlF_3 can be described as a(n)

- Lewis acid
- Bronsted-Lowry acid
- Lewis base
- Arrhenius acid

Question No. 20

Any reaction that release 150 kcal of energy can be classified as _____.

- activated
- oxidation
- exothermic
- endothermic

Question No. 25

Which of the following is not a conjugate acid-base pair?

- H_2SO_4 / HSO_4^-
- NH_4^+ / NH_3
- HSO_4^- / SO_4^{2-}
- CH_3COOH / $CH_3CO_2^-$

Question No. 21

In the following reaction, which reactant is a Brønsted-Lowry base?

$$HCl(aq) + KHS(aq) \rightarrow KCl(aq) + H_2S(aq)$$

- KCl
- KHS
- H_2S
- HCl

MKCL OES

Question No. 16

The oxidation number of iodine in KIO_4 is

- +7
- -7
- -1
- +1

Instructions

End Test

& Next

MKCL OES

Chemistry_S

Question No. 2

The elements cesium, potassium, and lithium

- have the same number of neutrons.
- are in the same group.
- are in the same period of elements.
- are isotopes of each other.

Save & Next حفظ والتالي

npaq LE1711

Question No. 12

How many moles of CO_2 could be produced when 1.5×10^{23} molecules of C_3H_7COOH completely react with oxygen gas according to the reaction?

$$C_3H_7COOH + 5O_2 \rightarrow 4CO_2 + 4H_2O$$

- 1.5 mol
- 3 mol
- 2 mol
- 1 mol

Save & Next حفظ والتالي

Question No. 3

How many moles of water, H_2O, are present in 75.0 g H_2O?

- 7.50 moles
- 4.41 moles
- 75.0 moles
- 4.17 moles

Question No. 22

Which of the following is true if the pH of a solution changes from 5 to 2?

- K_w increases
- $[H^+]$ decreases
- K_w decreases
- $[H^+]$ increases

Save & Next

MKCL OES

Chemistry_Se

Question No. 9

The chemical formula of the compound formed between sodium and fluorine is:

- Na_2F
- NaF_3
- NaF
- NaF_2

Save & Next

Compaq LE1711

Question No. 21

In the following equation identify the Brønsted-Lowry conjugate base:

$$NH_3 + HCN \rightarrow NH_4^+ + CN^-$$

- NH_4^+
- CN^-
- NH_3
- HCN

Question No. 12

The number of CO_2 molecules that are produced from burning of 57.11 g of C_8H_{18} (Molar mass = 114.22 g/mol) according to the following equation:

$$2\,C_8H_{18(l)} + 25\,O_{2(g)} \rightarrow 16\,CO_{2(g)} + 18\,H_2O_{(g)}$$

- 8 molecules.
- 6.02×10^{23} molecules.
- 16 molecules.
- 2.41×10^{24} molecules.

Save & Next حفظ والتالي

HP Compaq (E171)

Question No. 5

Of the elements: B, C, F and Li. The element with the smallest ionization energy is

- C
- Li
- B
- F

Save & Next حفظ و تالي

Question No. 19

When the forward reaction is favored:

- The rate of the forward reaction is less than the reverse reaction.
- The equilibrium constant is much greater than one; that is, $K_{eq} >> 1$
- The rate of the reverse reaction is greater than the forward reaction.
- The equilibrium constant is much less than one; that is, $K_{eq} << 1$.

Question No. 13

In the reaction below, what is the theoretical yield in grams for B_2H_6 when 5 moles of BF_3 react with 4 moles of NaH?

$$8BF_3 + 6NaH \rightarrow 6NaBF4 + B_2H_6$$

- 17.3 g
- 12.5 g
- 28.5 g
- 9.5 g

Question No. 14

How many liters of a 0.20 M NaOH solution contain 2.0 moles of NaOH?

- 5.0 L
- 0.5 L
- 20 L
- 10 L

Save & Next حفظ والتالي

Question No. 12

How many moles of CO_2 could be produced when 1.5×10^{23} molecules of C_3H_7COOH completely react with oxygen gas according to the reaction?

$$C_3H_7COOH + 5O_2 \rightarrow 4CO_2 + 4H_2O$$

- 2 mol
- 3 mol
- 1 mol
- 1.5 mol

Question No. 12

Calcium carbide (CaC_2) reacts with water to produce acetylene (C_2H_2):

$$CaC_2\,(s) + 2\,H_2O\,(g) \rightarrow Ca(OH)_2\,(s) + C_2H_2\,(g)$$

The complete reaction of 57.4 g of CaC_2 requires consumption of _____ g of H_2O.

- 64.1
- 1.79
- 0.895
- 32.3

Save & Next

Question No. 8

Nitrogen and oxygen form an extensive series of oxides with the general formula N_xO_y. What is the empirical formula for an oxide that contains 63.65% nitrogen?

- N_2O
- N_2O_3
- NO
- NO_2

Save & Next حفظ والتالي

Question No. 6

Which of the following is a molecular compound?

- $NaNO_3$
- P_2O_4
- CuF_2
- RbF

Save & Next حفظ والتالي

Chem

Question No. 22

The OH^- ion concentration of a blood sample is 1×10^{-7} *M*. The *pH* of the blood is

- $pH = 7$
- $pH = 1 \times 10^{+7}$
- $pH = -7$
- $pH = 1 \times 10^{-7}$

Question No. 6

Which of the following is a molecular compound?

- $NaNO_3$
- CH_2Cl_2
- KI
- $CuCl_2$

Save & Next حفظ والتالي

MKCL OES

Chemistry_Se

Question No. 5

Of the elements: B, C, F and Li. The element with the largest atomic radius is

- F
- Li
- C
- B

ve & Next حفظ والتالي

LEI711

MKCL OES

Chemistry_Sem1_ENH_2016-17

Question No. 2

Semiconductors are located in the periodic table on (or in) the

- right side of the table
- first period of the table
- left side of the table
- line dividing metals from nonmetals in the table

Save & Next

HP Compaq LE1711

Question No. 24

Which of these species will act as a Lewis acid?

- BF_3
- H_2O
- NH_3
- F^-

Question No. 17

Which molecule contains the strongest carbon-carbon bond?

- $H_3C–CH_3$
- $HC{\equiv}CH$
- $H_2C{=}CH_2$
- $F_2C{=}CF_2$

Save & Next حفظ والتالي

How many grams of CO_2 could be produced when 44 grams of C_3H_7COOH c
react with oxygen gas according to the reaction?

$$C_3H_7COOH + 5O_2 \rightarrow 4CO_2 + 4H_2O$$

- 88 g
- 44 g
- 132 g
- 22 g

Question No. 13

In the reaction below, what is the theoretical yield in moles for NO when 6 moles of NH_3 react with 7 moles of O_2?

$$4\,NH_3 + 5\,O_2 \rightarrow 4\,NO + 6\,H_2O$$

- 5.6 mol
- 7.0 mol
- 6.8 mol
- 4.6 mol

Save & Next حفظ والتالي

Question No. 18

Which of the following is the electron dot formula (Lewis structure) for an atom of fluorine?

(a) F· (b) ·F· (c) ·F· (d) :F:

- (c)
- (b)
- (d)
- (a)

Question No. 14

If 7.0 moles of KCl is dissolved in enough water to make 4.0 L of solution, what is the molarity of this solution?

- 0.75 M
- 1.75 M
- 2.5 M
- 0.4 M

Chemistry

Instructions

End

MKCL OES

Chemist

Question No. 13

In the reaction below, what is the theoretical yield in moles for NO when 5 moles of NH_3 react with 7 moles of O_2?

$$4\ NH_3 + 5\ O_2 \rightarrow 4\ NO + 6\ H_2O$$

- 4.8 mol
- 5.0 mol
- 3.6 mol
- 2.4 mol

Question No. 8

What is the molecular formula of a compound that has a molar mass of 70 g/mol and its empirical formula is CH_2?

- C_5H_{10}
- C_5H_{10}
- $C_{20}H_{40}$
- C_5H_{10}

Save & Next حفظ والتالي

Compaq LE1711

Question No. 9

Use the periodic table to answer the following question: K_2O is the formula for which compound?

- potassium (I) oxide
- potassium oxate
- potassium oxide
- potassium (II) oxide

Save & Next جمع والتالي

Question No. 11

Which of the following is a polyatomic ion?

- NO_3^{1-}
- Na^{1+}
- Br^{1-}
- S^{2-}

Save & Next जतन व पुढील

Question No. 19

Which of the following is true after a reaction reaches chemical equilibrium?

- The amount of products is increasing.
- The amount of reactants and products are constant.
- The amount of reactants is increasing.
- The amount of reactants and products are equal.

Save & Next جفظ وتالي

Question No. 4

Semiconductors are usually

- noble gases.
- metals.
- metalloids.
- nonmetals.

Save & Next

Question No. 7

What is the coefficient of H_2O when the following equation is properly balanced with the smallest set of whole numbers?

$$\_\_\_ Na + \_\_\_ H_2O \rightarrow \_\_\_ NaOH + \_\_\_ H_2$$

- 2
- 4
- 3
- 1

Save & Next حفظ والتالي

MKCL OES
Online Evaluation System

Question No. 24

Which of these species will act as a Lewis acid?

- F^-
- NH_3
- H_2O
- BF_3

Question No. 8

Determine the empirical formula for a compound that contains C, H and O. It contains 52.14% C, 13.13% H and 34.73% O by mass.

- C_2H_6O
- $C_2H_6O_2$
- $C_4H_{13}O_2$
- CH_4O_3

MKCL OES

Question No. 3

How many moles of water, H_2O, are present in 75.0 g H_2O?

- 4.41 moles
- 4.17 moles
- 75.0 moles
- 7.50 moles

Question No. 23

A solution with $[H_3O^+] = 1.00 \times 10^{-9}$ would have $[OH^-]$ equal to _____.

- 1×10^{-9} M
- 1×10^{-14} M
- 1×10^{-5} M
- 1×10^{-7} M

Save & Next حفظ و تالی

Question No. 3

One mole of particles of any substance contains how many particles?

- 6.02×10^{23}
- 3×10^{10}
- 3×10^{-10}
- 6.02×10^{-23}

Question No. 22

Which of the following solutions is acidic?

- $[H_3O^+] = 1.00 \times 10^{-11}$
- $[H_3O^+] = 1.00 \times 10^{-8}$
- $[H_3O^+] = 1.00 \times 10^{-3}$
- $[H_3O^+] = 1.00 \times 10^{-9}$

Save & Next حفظ و التالي

Question No. 16

Identify the *reducing agent* in the chemical reaction

$5Fe^{2+}(aq) + MnO_4^-(aq) + 8H^+(aq) \rightarrow 5Fe^{3+}(aq) + Mn^{2+}(aq) + 4H_2O(l)$.

- Fe^{2+}
- Fe^{3+}
- MnO_4^-
- Mn^{2+}

Save & Next حفظ والتالي

Question No. 1

According to Hund's Rule

- no two electrons in the same atom can have the same four quantum numbers.
- electrons found in the same orbital must have the same spin.
- electrons fill orbitals of the same energy singly and pair up only after the orbitals are all half filled.
- electrons pair first before filling other orbitals with same energy

e & Next حفظ والتالي

Question No. 21

A hydronium ion is a hydrogen ion bonded to which of the following?

- hydrogen atom
- water molecule
- hydroxide ion
- hydrogen molecule

Save & Next حفظ والتالي

Question No. 25

According to Bronsted-Lowry Theory, which acid is incorrect matched with its conjugate base? Acid conjugate Base

- HCO_3^- / CO_3^{2-}
- H_2F^+ / HF
- H_3O^+ / OH^-
- HCl / Cl^-

Question No. 1

The number of electrons in the outer energy level of a neutral atom of bromine is

- 3
- 7
- 5
- 2

Save & Next حفظ والتالي

MKCL OES

Question No. 15

The distinguishing characteristic of all electrolyte solutions is that they

- conduct heat
- react with other solutions.
- contain molecules.
- conduct electricity.

CL OES

Question No. 5

Of the elements: B, C, F and Li. The element with the highest ionization energy is

- F
- C
- B
- Li

Question No. 16

Which one of the following equations describes a ***redox*** reaction?

- $CaBr_2(aq) + H_2SO_4(aq) \rightarrow CaSO_4(s) + 2HBr(g)$
- $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$
- $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$
- $2KBr(aq) + Pb(NO_3)_2(aq) \rightarrow 2KNO_3(aq) + PbBr_2(s)$

Save & Next حفظ والتالي

Question No. 4

Semiconductors are usually

- noble gases.
- metals.
- metalloids.
- nonmetals.

Save & Next حفظ والتالي

Question No. 10

What is the mass percent of carbon in K_2CO_3?

- 34.7%
- 45.3%
- 8.7%
- 56.6%

Question No. 25

ccording to Bronsted-Lowry Theory, which acid is incorrect matched with its conjugate b

HCO_3^- / CO_3^{2-}

H_3O^+ / OH^-

HCl / Cl^-

H_2F^+ / HF

حفظ والتالى & Next

Question No. 18

Which of the following compounds contains a polar covalent bond?

- Br_2
- MgO
- NaF
- HCl

Save & Next حفظ والتالي

Question No. 20

When the temperature is decreased on the following system at equilibrium:

$$HCl_{(aq)} + Mg_{(s)} \rightleftharpoons MgCl_{2(aq)} + H_{2(g)} + \text{heat}$$

- In order to restore equilibrium, the reaction shifts right, toward products
- No change occurs
- NO one is true
- In order to restore equilibrium, the reaction shifts left, toward reactants

Question No. 24

Lewis Acid is defined as

- Produces OH^- ions in an aqueous solution
- an electron pair donor
- a proton acceptor
- an electron pair acceptor

Question No. 22

The OH^- ion concentration of a blood sample is 1×10^{-7} *M*. The *pH* of the blood is :

- pH = 7
- pH = $1 \times 10^{+7}$
- pH = - 7
- pH = 1×10^{-7}

Question No. 13

In the reaction below, what is the theoretical yield in grams for B_2H_6 when 5 moles of BF_3 react with 4 moles of NaH?

$$8BF_3 + 6NaH \rightarrow 6NaBF4 + B_2H_6$$

- 17.3 g
- 12.5 g
- 28.5 g
- 9.5 g

Question No. 15

Which of the following compounds gives a weak electrolyte aqueous solution?

- $C_6H_{12}O_6$
- NH_3
- HBr
- HCl

Question No. 1

According to Hund's Rule

- electrons pair first before filling other orbitals with same energy
- electrons fill orbitals of the same energy singly and pair up only after the orbitals are all half filled.
- no two electrons in the same atom can have the same four quantum numbers.
- electrons found in the same orbital must have the same spin.

MKCL OES

Chemistry_S

Question No. 11

The name of the chemical compound $Al_2(SO_4)_3$ is:

- aluminum(III) sulfite
- aluminum sulfite
- aluminum(III) sulfate
- aluminum sulfate

Save & Next जतन व पुढील

Question No. 15

Identify HCl.

- strong electrolyte, weak acid
- weak electrolyte, strong acid
- weak electrolyte, weak acid
- strong electrolyte, strong acid

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 14

Calculate the volume (in mL) of a 2.75 M solution that must be used to make 1.25 L of a 0.150 M solution.

- 0.0330 mL
- 68.2 mL
- 33.0 mL
- 0.0682 mL

Question No. 1

Any f orbital can hold up to _____ electrons.

- 18
- 8
- 14
- 6

Save & Next حفظ والتالي

Question No. 13

In the reaction below, what is the theoretical yield in grams for B_2H_6 when 6 moles of BF_3 react with 5 moles of NaH?

$$8\ BF_3 + 6\ NaH \rightarrow 6\ NaBF_4 + B_2H_6$$

- 25 g
- 21 g
- 17 g
- 13 g

Save & Next

Question No. 22

In a *basic* solution, pH is _____ and $[H_3O^+]$ is _____.

- = 7, 1 x 10^{-7} M
- < 7, < 1 x 10^{-7} M
- > 7, < 1 x 10^{-7} M
- < 7, > 1 x 10^{-7} M

Save & Next حفظ والتالي

Question No. 14

Calculate the volume (in mL) of a 2.75 M solution that must be used to make 1.25 L of a 0.150 M solution.

- 0.0330 mL
- 68.2 mL
- 33.0 mL
- 0.0682 mL

MKCL OES
Online Evaluation System

Question No. 7

What is the coefficient of carbon dioxide after balancing the following

$$\_\_Cr_2(CO_3)_3(s) \xrightarrow{\Delta} \_\_Cr_2O_3(s) + \_\_CO_2(g)$$

- 1
- 4
- 2
- 3

Save & Next حفظ و تالی

Question No. 14

How many liters of a 0.20 M NaOH solution contain 2.0 moles of NaOH?

- 5.0 L
- 10 L
- 0.5 L
- 20 L

ave & Next حفظ و التالي

MKCL OES
Online Evaluation System

Chemistry_Sem1_E

Question No. 5

The ionization energy of rubidium is higher than the ionization energy for _____.

- sodium
- cesium
- potassium
- lithium

Question No. 19

Express the equilibrium constant for the following reaction.

$$PCl_5\,(g) \rightleftharpoons PCl_3\,(g) + Cl_2\,(g)$$

- $K = \dfrac{[PCl_5]}{[PCl_3][Cl_2]}$
- $K = \dfrac{[PCl_3][Cl_2]}{[PCl_5]}$
- $K = \dfrac{[PCl_3]^2[Cl_2]^2}{[PCl_5]^2}$
- $K = \dfrac{[PCl_3][Cl]^2}{[PCl_5]}$

Save & Next حفظ والتالي

HP Compaq (E171)

MKCL OES
Online Evaluation System

Question No. 2

Which of these elements is chemically similar to magnesium?

- Iron
- Calcium
- Nickel
- Sulfur

MKCL OES

Question No. 5

Of the elements: B, C, F and Li. The element with the least metallic character is

- F
- C
- Li
- B

Next

Question No. 11

The name of the chemical compound $Al_2(SO_4)_3$ is:

- aluminum(III) sulfite
- aluminum sulfite
- aluminum(III) sulfate
- aluminum sulfate

Question No. 23

Which of the following is true if the hydronium ion concentration of an aqueous solution increases?

- K_W increases
- pH increases
- K_W decreases
- pH decreases

Question No. 4

Semiconductors are usually

- noble gases.
- metals.
- metalloids.
- nonmetals.

Save & Next جतन र पुढील

RCL OES

Question No. 15

Which of the following compounds gives a strong electrolyte aqueous solution?

- CH_3COOH
- $C_6H_{12}O_6$
- HBr
- NH_3

Save & Next

Question No. 17

A reaction that releases energy as it occurs, is classified as _____

- oxidation-reduction reaction
- catalyzed reaction
- endothermic reaction
- exothermic reaction

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 12

How many grams of $AlCl_3$ could be produced when 1.5 moles of Cl_2 completely react with aluminum according to the reaction?

$$2Al + 3Cl_2 \rightarrow 2AlCl_3$$

- 333 g
- 267 g
- 533 g
- 134 g

Save & Next حفظ والتالي

Question No. 2

Scandium belongs to:

- Transitional Metals
- noble gases
- alkaline earth metals
- halogens

حفظ والتالي & Next

Question No. 20

When the temperature is decreased on the following system at equilibrium:

$$HCl_{(aq)} + Mg_{(s)} \rightleftharpoons MgCl_{2(aq)} + H_{2(g)} + \text{heat}$$

- In order to restore equilibrium, the reaction shifts left, toward reactants
- NO one is true
- No change occurs
- In order to restore equilibrium, the reaction shifts right, toward products

Save & Next حفظ والتالي

Question No. 24

Which of these species will act as a Lewis acid?

- H_2O
- F^-
- BF_3
- NH_3

Save & Next جतन करा पुढील

Question No. 23

Which of the following is true if the hydronium ion concentration of an aqueous solution increases?

- K_w increases
- pH decreases
- K_w decreases
- pH increases

Question No. 23

A solution with $[H_3O^+] = 1.00 \times 10^{-9}$ would have $[OH^-]$ equal to _____

- 1×10^{-7} M
- 1×10^{-14} M
- 1×10^{-9} M
- 1×10^{-5} M

Save & Next حفظ و التالي

Question No. 8

The empirical formula of the compound CO is:

- CO
- C_3O_6
- C_2O_4
- CO_2

Save & Next حفظ والتالي

Question No. 12

Under appropriate conditions, nitrogen and hydrogen undergo a combination reaction to yield ammonia:

$$N_2\,(g) + 3\,H_2\,(g) \rightarrow 2NH_3\,(g)$$

A 7.1-g sample of N_2 requires _____ g of H_2 for complete reaction.

- 12
- 1.5
- 0.76
- 0.51

Instructions

Question No. 5

Of the elements: B, C, F and Li. The element with the smallest ionization energy is

- C
- LI
- B
- F

Save & Next جमा व पुढील

AAKCL OES

Chemistry_Sem

Question No. 17

Which molecule contains the strongest carbon-carbon bond?

- $H_2C{=}CF_2$
- $HC{\equiv}CH$
- $H_2C{=}CH_2$
- $H_3C{-}CH_3$

Save & Next

Instructions

End Test

Question No. 9

The chemical formula of the compound formed between barium and sulfur is:

- BaS_2
- Ba_2S
- Ba_2S_3
- BaS

Save & Next حفظ والتالي

Question No. 10

A chemical equation is balanced when

- the number of atoms of each element is the same in reactants and products.
- the total number of ions is the same in reactants and products.
- the sum of the coefficients of the reactants is equal to the sum of the coefficients of the produ
- the total number of molecules is the same in reactants and products.

INSTRUCTIONS: Please choose the BEST answer from the given options for each question.

Question:

According to the following reaction, which molecule is acting as an acid?

$$H_2O + NH_3 \rightarrow OH^- + NH_4^+$$

Options:

- OH^-
- NH_4^+
- NH_3
- H_2O

تسليم الإجابة
Submit Answer

إنهاء الاختبار
End Test

INSTRUCTION: Please choose the BEST answer from the given options for each question.

Question:
All of the following statements about different elements are true EXCEPT:

Options:

- Manganese is a transition metal.
- Barium is an alkaline earth metal.
- Sulfur is considered a metalloid.
- Krypton is one of the noble gases.

تسليم الإجابة
Submit Answer

HP Compaq LE1711

INSTRUCTION: Please choose the BEST answer from the given options for each question.

Question:
Which of the following is a diprotic acid?

Options:

- H_3PO_4
- $HC_2H_3O_2$
- HNO_3
- H_2SO_4

تسليم الإجابة
Submit Answer

L1710

Chemistry Reference Sheet

INSTRUCTION: تعليمات Please choose the BEST answer from the given options for each ques

Question:

Which one of the following amine bases does not appear in DNA?

Options:

- guanine
- adenine
- uracil
- cytosine

تسليم الإجابة
Submit Answer

INSTRUCTION : Please choose the BEST answer from the given options for each question.

Question:

In the following reaction, what is the effect on the direction of the reaction if more SO_3 is added to the reaction mixture?

$$2SO_2\,(g) + O_2\,(g) \rightleftharpoons 2SO_3\,(g)$$

Options:

- The position of the equilibrium remains unchanged.
- The equilibrium shifts to produce more products.
- The equilibrium shifts to produce more reactants.
- The rate of formation of products is increased.

تسليم الإجابة
Submit Answer

Question:

The compound CO_2 can be described as _____.

Options:

- Lewis acid
- Lewis base
- Bronsted-Lowry acid
- Arrhenius acid

تسليم الإجابة
Submit Answer

INSTRUCTION: تعليمات Please choose the BEST answer from the given options for ea

Question:

In the following reaction H_2SO_4 is _____.

$$H_2SO_4 + HI \longrightarrow I_2 + SO_2 + H_2O$$

Options:

- the oxidizing agent and is oxidized
- the reducing agent and is reduced
- the reducing agent and is oxidized
- the oxidizing agent and is reduced

تسليم الإجابة
Submit Answer

INSTRUCTION: Please choose the BEST answer from the given options for each question.

Question:

In this reaction, what is the substance oxidized?

$$Zn + 2\,HCl \rightarrow ZnCl_2 + H_2$$

Options:

- hydrogen
- chlorine
- zinc chloride
- zinc

Submit Ans

L1710

Please choose the BEST answer from the given options for each question.

Question:

The most correct name for the compound CCl_4 is:

Options:

- carbon trichloride
- carbon chloride
- carbon dichloride
- carbon tetrachloride

تسليم الإجابة
Submit Answer

Periodic Table of the Elements

Chem

Key

*Al

$$2.5 \times \frac{1}{26.982} \times \frac{2}{4} = 0.0463 \text{ mol} \longrightarrow \text{the limiting reactant}$$

*O_2

$$2.5 \times \frac{1}{2(15.999)} \times \frac{2}{3} = 0.052 \text{ mol}$$

0.0463 mol of Al $\times \left(2(26.982) + 3(15.999)\right)$ g/mol of Al_2O_3

$= 4.72$ g

---

* Percent yield $= \dfrac{\text{actual yield}}{\text{theoritical yield}} \times 100\%$

$= \dfrac{3.5}{4.72} \times 100\%$

$= 74\%$

Question No. 11

An ionic compound

- has a net positive charge.
- has a net negative charge.
- contains only cations.
- has a net charge of zero.

Question No. 9

Which pair of elements should form an ionic compound?

- Mg and Al
- K and S
- P and O
- N and Cl

Save & Next

Question No. 4

What is the charge on the ion formed by magnesium?

- 1-
- 2-
- 1+
- 2+

Question No. 3

All of the following statements about different elements are true EXCEPT:

- Barium is an alkaline earth metal.
- Manganese is a transition metal.
- Lithium is considered a metalloid.
- Krypton is one of the noble gases.

Question No. 2

Any d orbital can hold up to _____ electrons.

- 2
- 10
- 8
- 18

Question No. 1

What is the atomic symbol for silver?

- (•) S
- ( ) Ag
- ( ) Au
- ( ) Si

Question No. 1

Which of the following statements about atoms is FALSE?

- Atoms compose all matter.
- Atoms are the basic building block of nature.
- An atom is the smallest identifiable unit of an element.
- Atoms is composed from two or more elements.

Question No. 27

What is the oxidation number of nitrogen in NO_3^{-1}?

- 0
- -5
- -3
- +5

Save & Next حفظ والتالي

estion No. 27

The substance that causes the reduction of another substance is called

- anode
- cathode
- oxidizing agent
- reducing agent

MKCL OES

Question No. 3

Zinc is a member of which family?

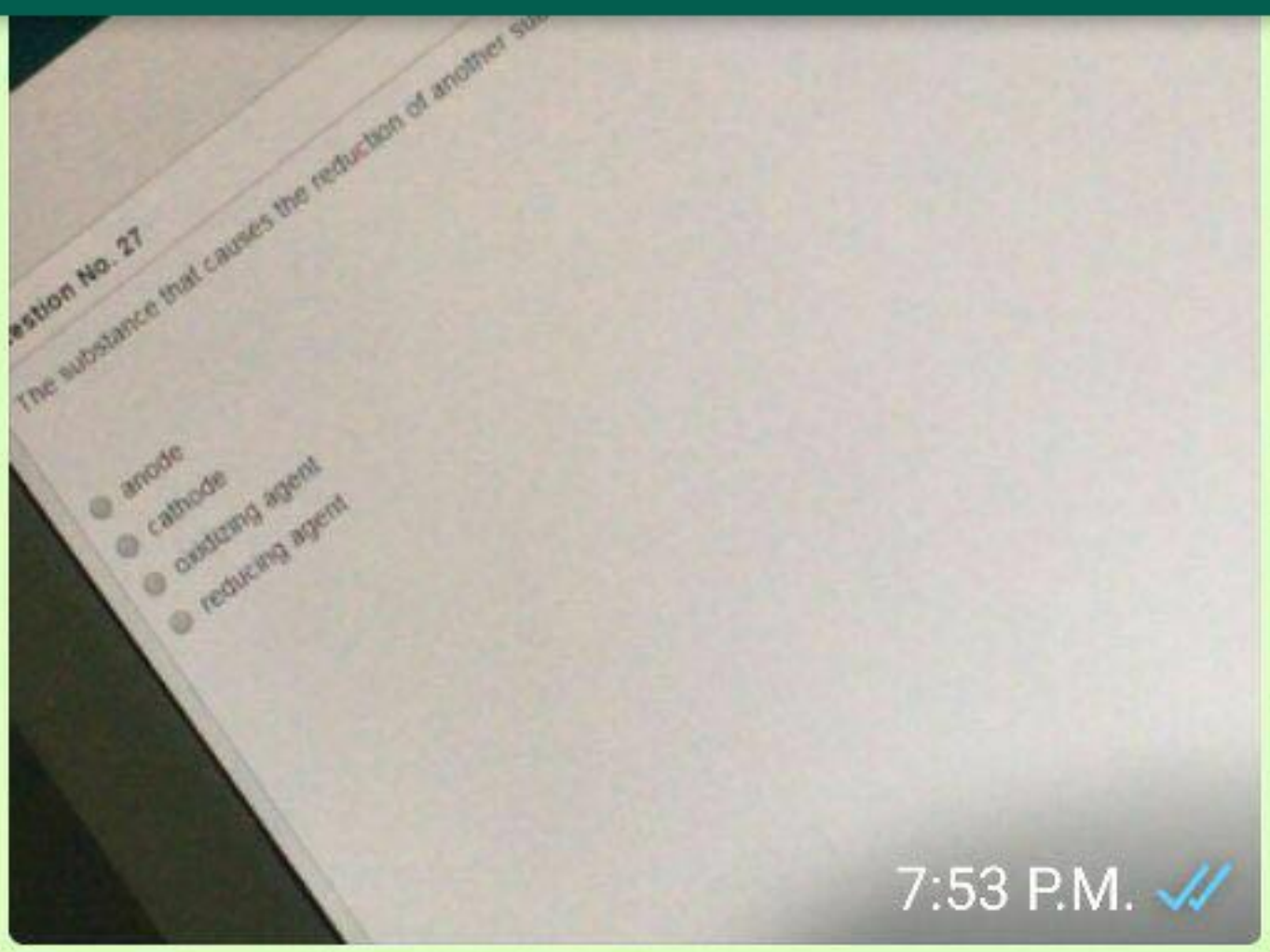
- noble gases
- halogens
- alkaline earth metals.
- Transitional Metals

Question No. 7

The ionization energy of atoms

- decreases going across a period.
- decreases going down within a group.
- increases going down within a group.
- does not change going down within a group.

Save & Next حفظ والتالي



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يعني تسبب الاختزال cause reduction
7:56 P.M.

وهي نفسها بتتأكسد 7:56 P.M.

يعني عامل مختزل 7:56 P.M.

Type a message

MKCL OES

ChemistryAMSem2Q22015-16

Question No. 10

The number which is located on the left of a chemical formula that helps to balance a chemical equation is called_____

- superscript
- exponent
- subscript
- coefficient

Save & Next

Compaq LE1711

able of the Elements

Chemistry P

MKCL OES
Online Evaluation System

Question No. 9

One of the following elements exists as a diatomic molecule:

- chlorine
- iron
- argon
- neon

Question No. 29

Which of the following is a general trend for the electronegativity of elements in the periodic table?

- increases from left to right; increases from bottom to top
- increases from left to right; decreases from bottom to top
- decreases from left to right; increases from bottom to top
- decreases from left to right; decreases from bottom to top

MKCL OES

Question No. 25

Which of the following compounds gives a non electrolyte aqueous solution?

- H_2CO_3
- H_3PO_4
- $C_{12}H_{22}O_{11}$
- Na_2CO_3

Question No. 25

Which of the following compounds gives a non electrolyte aqueous solution?

- $HClO_4$
- HF
- $C_6H_{12}O_6$
- CH_3COOH

MKCL OES

ChemistryAMSe

Question No. 1

Which statement below accurately describes the contributions of Josef Proust?

- ancient Greek philosopher who proposed that matter was continuous
- created the modern periodic table
- proposed the modern Atomic Theory
- discovered the law of definite proportions

Save & Next جمع والتالي

HP Compaq LE1711

In the reaction below, what is the theoretical yield in moles for NO when 5 moles of NH_3 react with 6 moles of O_2?

$$4\,NH_3 + 5\,O_2 \rightarrow 4\,NO + 6\,H_2O$$

- 2.4 mol
- 3.6 mol
- 4.8 mol
- 5.0 mol

ايات واحد من هذي الخيار الصح ؟
يبغى

..strong electrolyte

- H2 CO3
- H3 PO4
-C6 H12 O6
- Na2 CO3

١١:٢٧

اكتب رسالة

A 0.100 mole sample of lithium, Li, has a mass of?

A 0.100 mole sample of lithium, Li, has a mass of

a. 3.00 g
b. 0.300 g
c. 6.94 g
d. 0.694 g

Question No. 23

What is the molarity of $FeCl_3$ in a solution prepared by dissolving 10.0 g of $FeCl_3$ in enough water to make 275 mL of solution?

- 2.24×10^{-4} M
- 0.224 M
- 4.46 M
- 4.46×10^{3} M