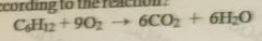
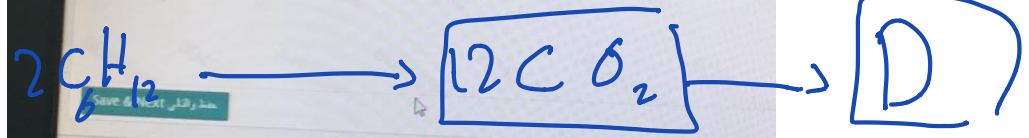


Question No. 7
How many moles of CO₂ could be produced when 168 grams of C₆H₁₂ completely react with oxygen gas according to the reaction?



- 4 mol
- 10 mol
- 6 mol
- 12 mol

$$\text{mole of C}_6\text{H}_{12} = \frac{g}{\text{d.A}} = \frac{168}{(12 \times 6) + (12 \times 1)} = \boxed{2\text{m}}$$



HP LE1901w

Question No. 2

What is the general term for a substance dissolved in water?

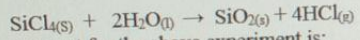
- covalent substance
- aqueous solution
- ionic salt
- water solution

B

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Question No. 1

In an experiment, 50.0 g of silicon tetrachloride (SiCl_4) is treated with 20.0 g of water to produce silicon dioxide (SiO_2) according to the following balanced equation:



The limiting reactant for the above experiment is:

- SiCl_4
- SiO_2
- H_2O
- HCl

Save & Next

A

(1)

$$\begin{aligned} \text{mole of SiCl}_4 &= \frac{g}{A.A} \\ &= \frac{50}{(28 \times 1) + (35.46 \times 4)} = \boxed{0.29 \text{ m}} \end{aligned}$$



(2)

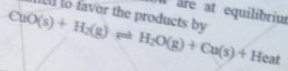
$$\text{mole of H}_2\text{O} = \frac{g}{A.A} = \frac{20}{16+2}$$

$$= 1.11 \text{ m}$$

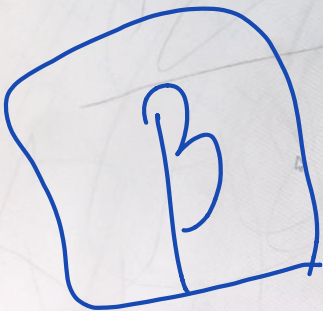


Question No. 1

When the substances in the equation below are at equilibrium, at pressure P and temperature T , the equilibrium can be shifted to favor the products by



- decreasing the pressure.
- decreasing the temperature
- adding more CuO
- increasing the pressure.

A large, hand-drawn blue box is drawn around the letter 'B', which is the correct answer to the question. The box is roughly rectangular with rounded corners and a thick blue outline.

Question No. 2

What is the oxidation number of manganese in MnO_2 ?

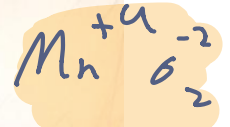
- +1
- +2
- +4
- 0

* صحیح جواب خنات امر کب = 4 ہے

$$MnO_2 = x + (-2)(2) = 0$$

$$= x - 4 = 0$$

$$x = +4$$



C

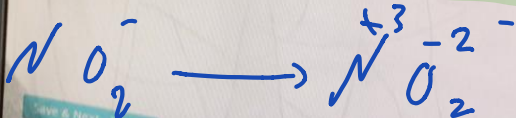
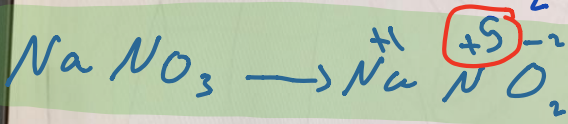
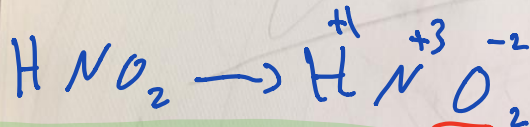
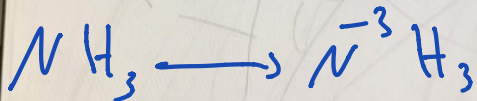
Save & Next

Total questions in exam: 40 | Answered: 6

Question No. 4

In which species does nitrogen have the highest oxidation number?

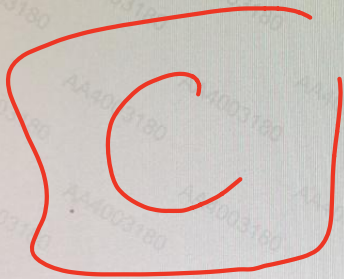
- NH₃
- HNO₂
- NaNO₃
- NO₂⁻



Question No. 5

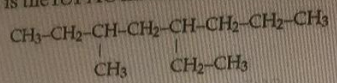
For the reaction: $C_{(s)} + H_2O_{(g)} \rightleftharpoons H_{2(g)} + CO_{(g)}$ ΔH is positive (endothermic)
What would be the effect of removing H_2 gas from the reaction vessel?

- More water will be formed.
- The reaction will shift to the left.
- The reaction will shift to the right.
- The reaction will not be affected.

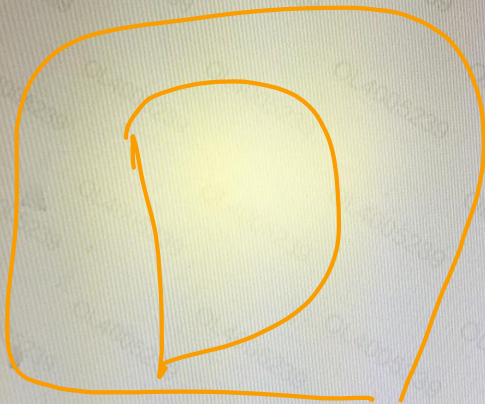


Save & Next حفظ والتالي

What is the IUPAC name for the following?



- 4-ethyl-6-methyloctane
- 3-ethyl-5-methyloctane
- isooctane
- 5-ethyl-3-methyloctane



Save & Next حفظ والتالي

Question No. 6

Which of the following solutions is the most basic?

- $[\text{H}_3\text{O}^+] = 1.0 \times 10^{-10} \text{ M}$
- $[\text{OH}^-] = 1.0 \times 10^{-10} \text{ M}$
- $[\text{OH}^-] < 1.0 \times 10^{-10} \text{ M}$
- $[\text{H}_3\text{O}^+] > 1.0 \times 10^{-7} \text{ M}$

A

Save & Next حفظ و التالي

A chemical reaction has reached equilibrium when _____

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

A



MKCL OES

Question No. 21

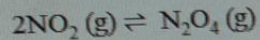
The compound CO_2 can be described as _____

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

A

Question No. 9

In the following reaction, what is the effect of adding more NO_2 to the starting reaction mixture?



- It would make the reaction more endothermic.
- It would increase the final quantity of products.
- It would make the reaction more exothermic.
- It would decrease the final quantity of products.

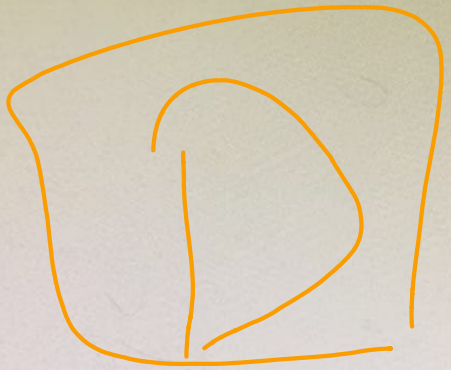
B

Question No. 30

..... are the most reactive hydrocarbons.

- cycloalkanes
- alkanes
- alkenes
- alkynes

سائبرموگ
منص



Question No. 3

What is the name of this compound?



- cyclohexane
- cyclopentane
- cyclooctane
- cycloheptane

A

Total questions in exam: 40 | Answered: 0

Question No. 1

What is the molecular formula of a compound that has a molar mass of 116 g/mol and its empirical formula is C_2H_5 ?

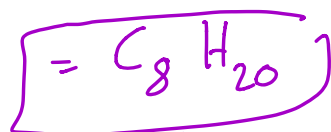
- C_6H_{15}
- C_2H_5
- C_8H_{20}
- C_6H_{20}

Molecular formula = e · empirical

$$e = \frac{\text{molar mass of molecular}}{\text{molar mass of empirical}}$$

$$e = \frac{116}{29} = 4$$

Molecular formula = 4 · C₂H₅



Question No. 4

The main characteristic of all weak electrolyte solutions is that they _____

- do not conduct electricity
- completely ionize in aqueous solutions
- do not dissolve in water
- partially ionize in aqueous solutions

D

Total questions in exam: 40 | Answered: 0

Question No. 5

The molarity (M) of an aqueous solution containing 22.5 g of sucrose ($C_{12}H_{22}O_{11}$) in 35.5 mL of solution is _____.

- 1.85
- 0.0657
- 0.104
- 3.52

A

$$\text{Molarity} = \frac{\text{amount of solution}}{\text{Volume}}$$

$$\text{mol} = \frac{22.5}{342} = 0.06 \text{ m}$$

$$\text{Volume} = \frac{35.4}{1000} = 0.0354$$

$$\text{molarity} = \frac{0.06}{0.0354} = 1.69 \text{ M}$$

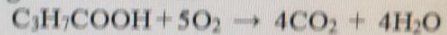
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A

Total questions in exam: 40 | Answered: 0

Question No. 6

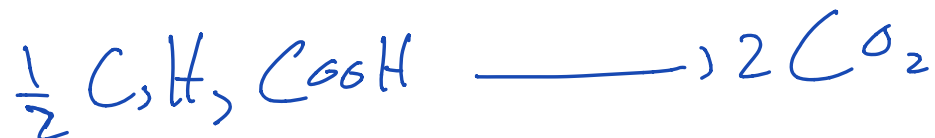
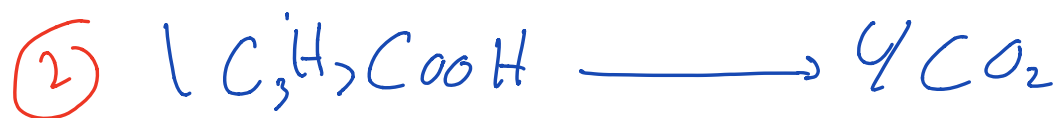
How many grams of CO_2 could be produced when 44 grams of $\text{C}_3\text{H}_7\text{COOH}$ completely react with oxygen gas according to the reaction?



- 44 g
- 22 g
- 133 g
- 88 g

D

$$\uparrow \text{C}_3\text{H}_7\text{COOH} = \frac{44}{88} = \frac{1}{2} \text{ mole}$$



$$\textcircled{3} \quad \text{grams} = 2 \cdot (12 \times 1) + (16 \times 2)$$

$$= 2 \times 44$$

$$= 88$$

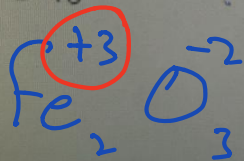
↓

D

Question No. 8

What is the oxidation number of iron in Fe_2O_3 ?

- +3
- 3
- 6
- +6

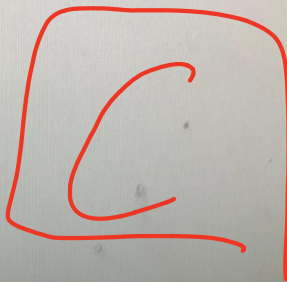


A

Question No. 7

The compound NH_3 can be described as _____.

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



Total questions in exam: 40 | Answered: 0

Question No. 9

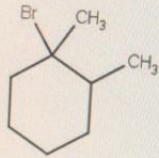
Calculate the volume (in liter) of a solution that contains 3.12 moles of NaCl if the molarity of this solution is 6.67 M NaCl.

- 2.823 L
- 2.141 L
- 0.208 L
- 0.468 L

$$\text{Volume} = \frac{m}{M} = \frac{3.12}{6.67} = 0.46 \text{ L} \rightarrow \text{D}$$

Question No. 10

Choose the correct name for the following compound:



- 1-bromo-1,2-dimethylbenzene
- 1-bromo-1,2-dimethylcyclohexane
- 2-bromo-2-methyltoluene
- 2-bromo-1,2-dimethylcyclohexane

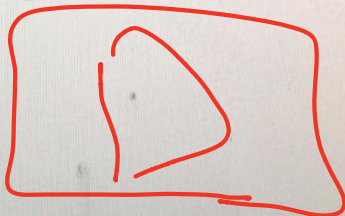
3

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Question No. 11

In the "Basic" solutions, _____

- pH < 7 and $[\text{H}_3\text{O}^+] > 10^{-7} \text{ M}$
- pH = 7 and $[\text{H}_3\text{O}^+] = 10^{-7} \text{ M}$
- pH > 7 and $[\text{H}_3\text{O}^+] > 10^{-7} \text{ M}$
- pH > 7 and $[\text{H}_3\text{O}^+] < 10^{-7} \text{ M}$



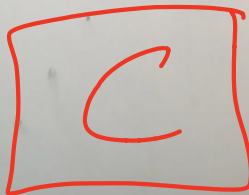
Total questions in exam: 40 | Answered: 0

Question No. 17

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 ?

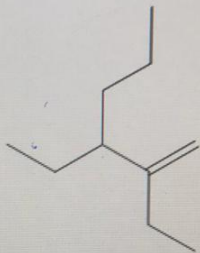


- 3.6 mol
- 2.4 mol
- 5.0 mol
- 4.8 mol



Question No. 12

Name the following organic compound:

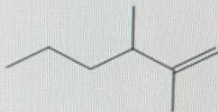


- 4-ethyl-3-methyleneheptane
- 2,3-diethyl-1-hexene
- 2,3-diethyl-1-hexyne
- 2-ethyl-3-propyl-1-pentene

B

Question No. 15

Provide the name of the compound below.

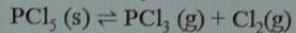


- 2,3-dimethyl-1-hexene
- 2,3-dimethyl-2-hexene
- 4,5-dimethyl-5-hexene
- 4,5-dimethyl-6-hexene

A

Question No. 12

The reaction for the decomposition of PCl_5 to chlorine and PCl_3 is shown below.



If the equilibrium concentrations are $[\text{PCl}_5] = 1.0 \text{ M}$, $[\text{PCl}_3] = 1.0 \text{ M}$, $[\text{Cl}_2] = 0.10 \text{ M}$, what is the value of the equilibrium constant?

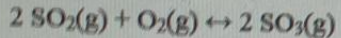
- $K_c = 1.0 \times 10^2$
- $K_c = 1.0 \times 10^{-2}$
- $K_c = 1.0 \times 10^{-4}$
- $K_c = 1.0 \times 10^{-1}$

$$K_c = [1] [0.1]$$

$$K_c = 0.1 = 1 \times 10^{-1} \rightarrow D$$

Question No. 13

Consider the reaction:



If, at equilibrium at a certain temperature, $[\text{SO}_2] = 1.50 \text{ M}$, $[\text{O}_2] = 0.120 \text{ M}$, and $[\text{SO}_3] = 1.25 \text{ M}$, what is the value of the equilibrium constant K_{eq} ?

- 0.14
- 6.94
- 6.79
- 8.68

$$K_{\text{eq}} = \frac{[1.25]^2}{[1.5]^2 [0.12]} = 5.29 \rightarrow \text{C}$$

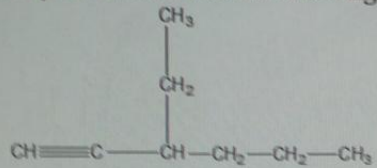
Question No. 15

A compound that has a molar mass of 60 g/mol and an empirical formula of CH_2O , its molecular formula is:

- CH_2O .
- $\text{C}_2\text{H}_4\text{O}$.
- $\text{C}_2\text{H}_4\text{O}_2$.
- $\text{C}_3\text{H}_6\text{O}_3$.



What is the correct systematic name of the following compound?

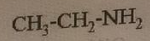


- 3-ethyl-1-heptyne
- 4-ethyl-5-hexyne
- 3-ethyl-1-hexyne
- 4-ethyl-1-hexyne

A

Question No. 4

What is the family of this organic compound?



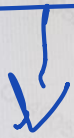
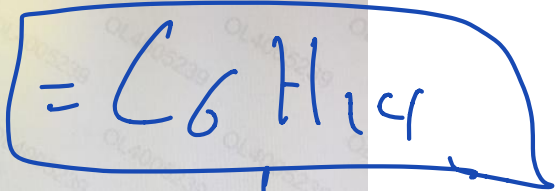
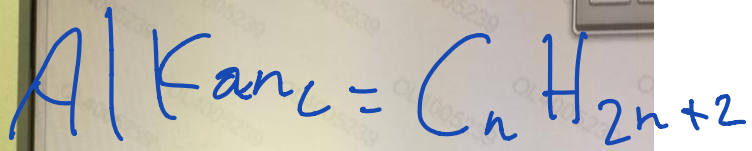
- phenol
- amine
- amide
- ether

B

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Which of the following molecular formulas is an "alkane"?

- C₆H₁₄
- C₆H₁₂
- C₆H₁₀
- C₆H₁₆



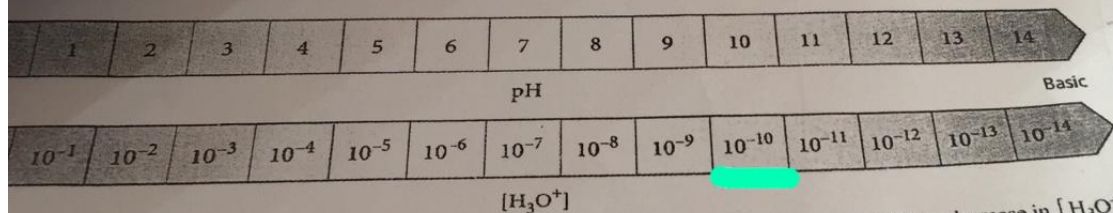
A

Save & Next حفظ والتالي

... pH, start with the equation that defines pH.
... of pH and then solve for $[H_3O^+]$. Since the given
... to two decimal places, the $[H_3O^+]$ is written to two
(Remember that $10^{\log x} = x$. Some calculators use an inv
... sent this function.)

$$\begin{aligned} \text{pH} &= -\log [H_3O^+] \\ 4.80 &= -\log [H_3O^+] \\ -4.80 &= \log [H_3O^+] \\ 10^{-4.80} &= 10^{\log [H_3O^+]} \\ 10^{-4.80} &= [H_3O^+] \\ [H_3O^+] &= 1.6 \times 10^{-5} \text{ M} \end{aligned}$$

The pH Scale



▲ **Figure 5.11 The pH Scale** An increase of 1 on the pH scale corresponds to a decrease in $[H_3O^+]$ by a factor of 10.

ص 9:00

Question No. 11

The correct name for the compound CO is _____

- carbon monoxide
- carbon oxide
- monocarbon monoxide
- carbon dioxide

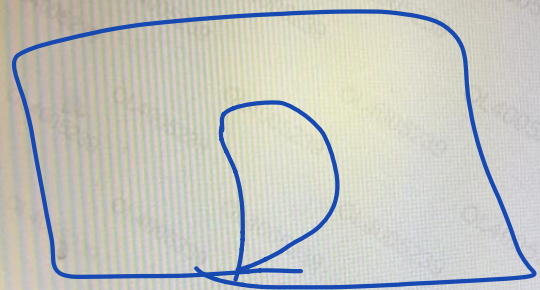
A

Save & Next حفظ والتالي

Question No. 7

What is the conjugate acid of NH_3 ?

- NH_3
- NH_2
- NO_3
- NH_4^+



Save & Next حفظ و التالي

Question No. 27

After a chemical reaction reaches equilibrium, _____.

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

C

Question No. 6

In the reaction:



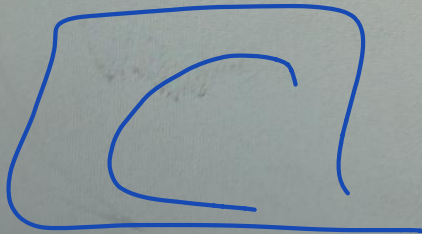
- $\text{Cu}_{(s)}$ is the reducing agent and $\text{Ag}^{+}_{(aq)}$ is reduced.
- $\text{Ag}^{+}_{(aq)}$ is the reducing agent and $\text{Cu}_{(s)}$ is reduced.
- $\text{Ag}^{+}_{(aq)}$ is oxidizing agent and $\text{Cu}_{(s)}$ is reduced
- $\text{Cu}_{(s)}$ is the oxidizing agent and $\text{Ag}^{+}_{(aq)}$ is oxidized.

A

Question No. 23

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

- NaF_2
- Na_2F
- NaF
- NaF_3



Total questions in exam: 40 | Answered: 0

Question No. 25

What is the term for the pairs of valence electrons that are not shared in a molecule?

- core electrons
- bonding electrons
- lone pairs of electrons
- sharing electrons



Question No. 12

The substance that causes the reduction of another substance is called:

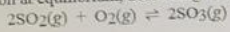
- anode
- reducing agent
- oxidizing agent
- cathode

B

15 25 2P 3P

Question No. 5

Consider the following reaction at equilibrium, decreasing the pressure will _____.



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

A

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User: BD4005957

Number of main questions: 40

Number of questions: 40

26 Answered

14 Not Answered

0 Not Visited

0 Partially Answered

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	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40		

Calculator

Instructions

End Test



Question No. 26

The mass percent composition of sulfur in H_2S is:

- 32.7%
- 22.7%
- 94.1%
- 5.9%

$$\frac{32}{34} \times 100 = 94.1\%$$

C

Question No. 20

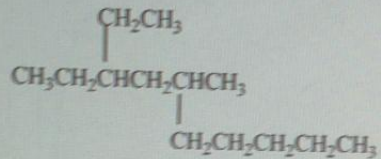
Calculate the mass of 500 atoms of iron (Fe).

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



Question No. 40

What is the IUPAC name of this compound?

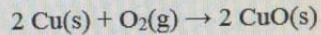


- 3-ethyl-5-methyldecane
- 1-octylpentane
- 3-ethyl-2-pentylhexane
- 8-ethyl-6-methyldecane

A

Question No. 34

What is the correct equilibrium constant expression for the following reaction?



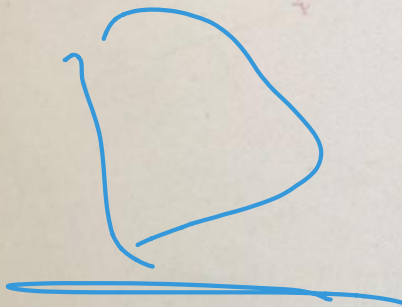
- $K_{\text{eq}} = [\text{CuO}]^2 / [\text{O}_2]$
- $K_{\text{eq}} = [\text{CuO}]^2 / [\text{Cu}]^2[\text{O}_2]$
- $K_{\text{eq}} = 1 / [\text{O}_2]$
- $K_{\text{eq}} = [\text{O}_2]$

MS

Question No. 42

When heat (q) has positive value, this means that _____.

- The system loses thermal energy.
- The work (w) = 0.
- The surrounding gains thermal energy.
- The system gains thermal energy.



Question No. 3

The compound below is an



- acid
- amide
- ester
- amine

D

Save & Next

Total questions in exam: 40 | Answered: 5

Question No. 12

If a drain cleaning solution has a pH = 13, this solution is _____

- strongly acidic
- strongly basic
- weakly basic
- weakly acidic

B

Save & Next حفظ و التالي

Total questions in exam: 40 | Answered: 11

Question No. 14

The following structure corresponds to a alcohol.



- Primary
- Tertiary
- Quaternary
- Secondary

B

Save & Next حفظ و التالي

Total questions in exam: 40 | Answered: 14

Question No. 26

How many Lithium (Li) atoms are contained in 97.9 g of Lithium?

- 8.49×10^{24} Li atoms
- 5.90×10^{25} Li atoms
- 4.27×10^{22} Li atoms
- 7.09×10^{21} Li atoms

Save & Next

A

Total questions in exam: 40 | Answered: 11

Question No. 32

Which of the following pairs is NOT a conjugate acid-base pair according to the concept of Bronsted-Lowry?

- H_3PO_4 and HPO_4^{2-}
- H_3PO_4 and H_2PO_4^-
- H_2PO_4^- and HPO_4^{2-}
- HPO_4^{2-} and PO_4^{3-}

A

Total questions in exam: 40 | Answered: 0

Question No. 22

The name of the chemical compound Cu_2CO_3 is:

- copper(II) carbonate
- copper(III) carbonate
- copper(I) carbonate
- copper carbonate

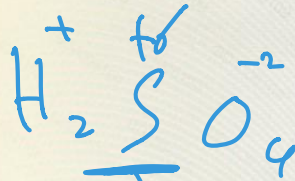
C

Total questions in exam: 40 | Answered: 18

Question No. 34

What is the oxidation number of sulfur in H_2SO_4 ?

- 2
- +4
- +6
- +2



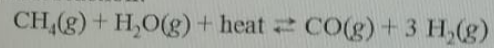
Save & Next

C

Total questions in exam: 40 | Answered: 0

Question No. 5

Which of the changes listed below will shift the equilibrium position to the right for the following reversible reaction?



- A decrease of volume
- A decrease of $[\text{CH}_4]$
- A decrease of temperature
- A decrease of $[\text{CO}]$

D

Total questions in exam: 40 | Answered: 0

Question No. 2

Which of the following expression symbols is used for quantifying acidity and basicity?

- aH
- bH
- eH
- pH

D

Total questions in exam: 40 | Answered: 0

Question No. 7

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



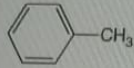
- (a)
 (b)
 (c)
 (d)

B

Total questions in exam: 40 | Answered: 0

Question No. 1

What is the name of compound shown below?



- benzene
- phenol
- toluene
- aniline

C

Total questions in exam 40 | Answered: 0

Question No. 8

What is the $[\text{OH}^-]$ in a solution that has a $[\text{H}_3\text{O}^+] = 1 \times 10^{-6} \text{ M}$?

- $1 \times 10^{-2} \text{ M}$
- $1 \times 10^{-6} \text{ M}$
- $1 \times 10^{-10} \text{ M}$
- $1 \times 10^{-8} \text{ M}$

$$[\text{H}_3\text{O}^+] \cdot [\text{OH}^-] = 1 \times 10^{-14}$$

$$[\text{OH}^-] = \frac{1 \times 10^{-14}}{1 \times 10^{-6}}$$

$$[\text{OH}^-] = 1 \times 10^{-8} \rightarrow \text{D}$$

Total questions in exam: 40 | Answered: 0

Question No. 3

Which one of the following is a Lewis base?

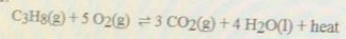
- BF_3
- AlCl_3
- NH_4^+
- NH_3

D

Total questions in exam: 40 | Answered: 27

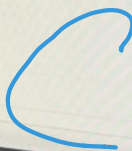
Question No. 38

Consider the following reaction at equilibrium. What effect will increasing the temperature have on the system?



- The reaction will shift to the right in the direction of products.
- The equilibrium constant will increase.
- The reaction will shift to the left in the direction of reactants.
- More CO_2 will be formed.

Save & Next



Question No. 3

What is the oxidation number of nitrogen in NO_3^{-1} ?

- 0
- 2
- 5
- +5

D

Save & Next حفظ و التالي

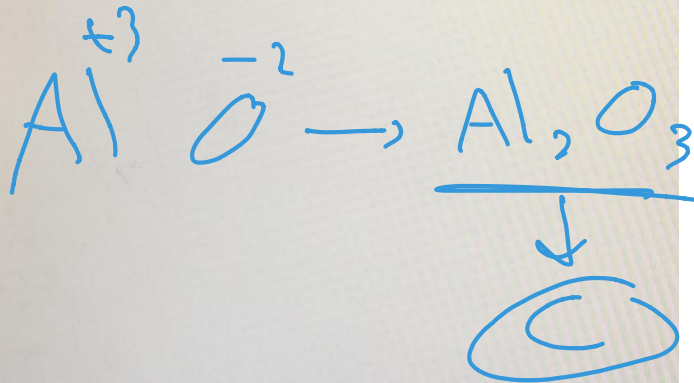


Total questions in exam: 40 | Answered: 7

Question No. 5

What is the chemical formula of the product formed by the reaction between aluminum and oxygen?

- AlO
- Al₃O₂
- Al₂O₃
- Al₃O





Total questions in exam: 40 | Answered: 2

Question No. 5

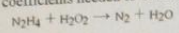
What is the term for the concentration expression that relates the moles of solute dissolved in each liter of

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

A

Question No. 39

What are the correct coefficients needed to balance the reaction below?



- 2, 4, 2, 8
- 1, 1, 1, 1
- 1, 4, 1, 4
- 1, 2, 1, 4

D

Save & Next حفظ و التالي

HP Compaq LE1711

Question No. 28

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



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

C

Save & Submit

HP Compaq (E171)

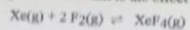
1
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Save & Next حفظ التالي

1710

Consider the following reaction at equilibrium. What is the effect of reducing the volume on the system?



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

13

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

Question No. 13

Which of the following pairs of systematic names and common names is correctly matching?

- toluene = hydroxybenzene
- aniline = aminobenzene
- acetylene = ethene
- phenol = methylbenzene

B

حفظ والتالي Save & Next

Question No. 12

Provide the name of the compound below.



- methylcyclohexane
- ethylcyclopentane
- methylcyclopentane
- methylcyclopropane

Scientific Calculator

M

mod Deg Rad

MC

sinh cosh tanh Exp () ←

sinh⁻¹ cosh⁻¹ tanh⁻¹ log₂x ln log 7

π e n! log_yx e^x 10^x 4

sin cos tan x^y x³ x² 1

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16 من الصور



حفظ و Next

HP Compaq (L171)

ص 11:02

Total questions in exam: 40 | Answered: 1

Question No. 11

In aqueous solutions, the conjugate base of HF is _____

- H^+
- F^-
- H_2O
- OH^-

B

ص 11:02

MKCL OES



Question No. 3

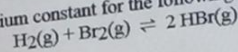
The correct name for the acid HBr is _____ acid

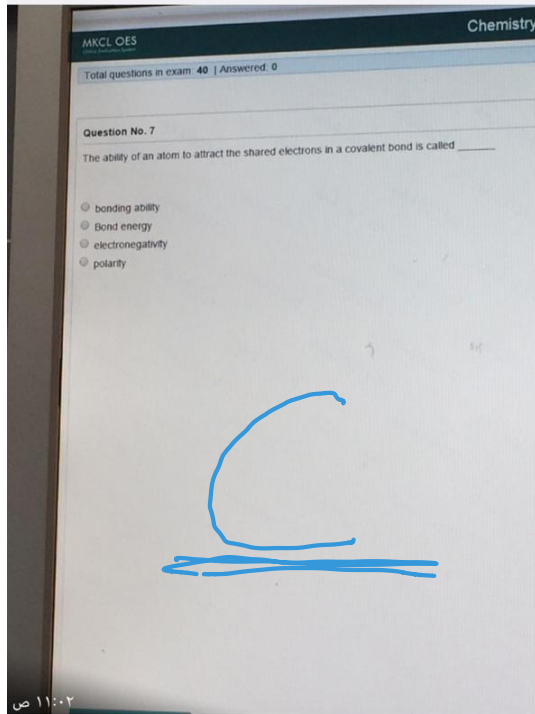
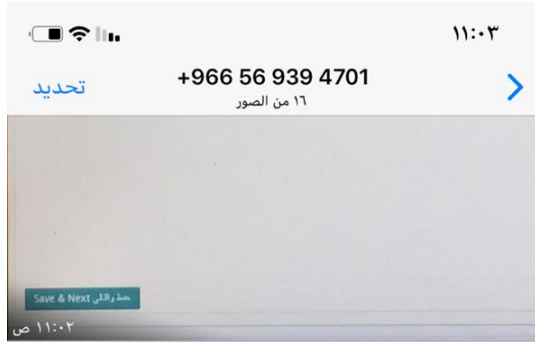
- hydrogen bromate
- hydrogen bromine
- hydrobromic
- hydrogen bromide

C

Question No. 4

Express the equilibrium constant for the following reaction.





Total questions in exam: 40 | Answered: 12

Question No. 18

What is the molecular formula of a compound that has a molar mass of 180 g/mol and its empirical formula is CH_2O ?

- $\text{C}_2\text{H}_2\text{O}_2$
- $\text{C}_4\text{H}_8\text{O}_4$
- $\text{C}_3\text{H}_{10}\text{O}_5$
- $\text{C}_6\text{H}_{12}\text{O}_6$

18

Save & Next حفظ و التالي

Total questions in exam: 40 | Answered: 35

Question No. 21

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

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

Save & Next

D

Total questions in exam: 40 | Answered: 39

Question No. 33

What is the molarity of FeCl₃ in a solution prepared by dissolving 10.0 g of FeCl₃ in enough water to make 275 mL of solution?

- 0.224 M
- 4.46 M
- 4.46×10^3 M
- 2.24×10^{-4} M

$$\frac{0.062}{0.275} = 0.224 \rightarrow (A)$$

Save & Next

Question No. 10

According to Bronsted-Lowry definition, which acid is incorrectly matched with its conjugate base? (Acid / conjugate base)

- Ⓐ $\text{HCO}_3^- / \text{CO}_3^{2-}$
- Ⓑ HF^+ / HF
- Ⓒ $\text{H}_3\text{O}^+ / \text{OH}^-$
- Ⓓ HCl / Cl^-



Save & Next

Number of

18	Answer
0	Fail
1	2
4	9
15	16
22	23
29	30
36	37

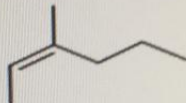
HP Compaq [E171]

PC-8



Question No. 4

What is the name of the following compound?



- 4-ethyl-4-hexene
- 3-methylenehexane
- 3-methyl-3-hexene
- 3-methyl-2-hexene

D

Question No. 1

An aqueous solution of _____ is considered as strong electrolyte, thus, it can conduct electricity.

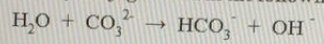
- CO_2
- $\text{C}_6\text{H}_{12}\text{O}_6$
- LiCl
- C_8H_{18}

C

Save & Next حفظ و التالي

Question No. 7

Identify the Bronsted-Lowry conjugate acid in the following reaction.



- H₂O
- OH⁻
- HCO₃⁻
- CO₃²⁻

C

Total questions in exam: 40 | Answered: 23

Question No. 4

What is the term for a bond in which a pair of electrons is shared equally?

- polar covalent bond
- ionic bond
- electrovalent bond
- nonpolar covalent bond

D

Total questions in exam: 40 | Answered: 17

Question No. 16

How many grams of NaCl are there in 55.0 mL of a 1.90 M aqueous solution of NaCl?

- 0.105
- 3.21
- 12.2
- 6.11

D

Save & Next حفظ و التالي

Question No. 30

Which of the following is a general property of an acidic solution?

- tastes sour
- turns litmus paper to red
- pH is less than 7
- all are correct

D

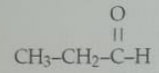
Question No. 25

What is the molecular formula of a compound that has a molar mass of 68 g/mol and its empirical formula is HO?

- H₂O
- H₂O₃
- H₄O₄
- H₂O₄

4

What is the family of this organic compound?



- aldehyde
- ketone
- carboxylic acid
- ester



Question No. 20

Which of the following substances contains a nonpolar covalent bond?

- H_3O^+
- NaCl
- NH_3
- N_2

14

Question No. 4

What is the IUPAC name for $\text{CH}_3\text{-CH}_2\text{-C}\equiv\text{CH}$?

- 3-butyne
- 1-butyne
- 2-butyne
- butyne

B

Question No. 28

Which of the following pairs of species is NOT a conjugate acid-base pair?

- H_2O and OH^-
- H_2SO_4 and HSO_4^-
- NH_3 and NH_2^-
- HSO_4^- and SO_4^{2-}

C

Total questions in exam: 40 | Answered: 24

Question No. 36

If the reaction is endothermic, which of the following is always true?

- the reaction rate is fast
- the reaction takes in heat
- the reaction gives out heat
- the reaction rate is slow

B

Question No. 22

Which of these organic compounds is "unsaturated"?

- C_3H_4
- CH_3OH
- CH_4
- C_3H_{10}

D

Question No. 10

The mass% of H in Eethane (C_2H_6) is _____.

- 20.1
- 74.9
- 79.9
- 4.0

A

Question No. 11

What mass (g) of NaBr is contained in 0.25 L of a sodium bromide solution that has a molarity of 1.20 M?

- 2.32 g
- 30.9 g
- 37.3 g
- 4.93 g

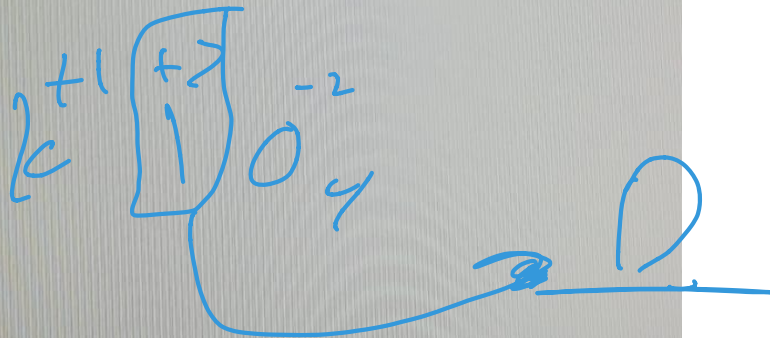
47

Save & Next حفظ والتالي

Question No. 33

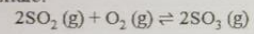
The oxidation number of iodine in KIO_4 is

- +1
- 1
- 7
- +7



Question No. 12

In the following reaction, what is the effect on the direction of the reaction if more SO_3 is added to the reaction mixture?



- The equilibrium shifts to produce more products.
- The rate of formation of products is increased.
- The position of the equilibrium remains unchanged.
- The equilibrium shifts to produce more reactants.

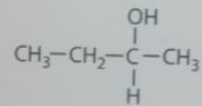
D

Save & Next حفظ و التالي

Total questions in exam: 40 | Answered: 31

Question No. 15

What is the type of the following alcohol?

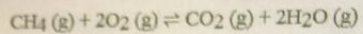


- Primary
- Secondary
- Tertiary
- Quaternary

B

Question No. 27

Refer to the equilibrium shown below. Which of the following will shift the reaction to the right?



- adding excess oxygen
- increasing the pressure
- removing carbon dioxide as soon as it is formed
- adding O_2 and removing CO_2

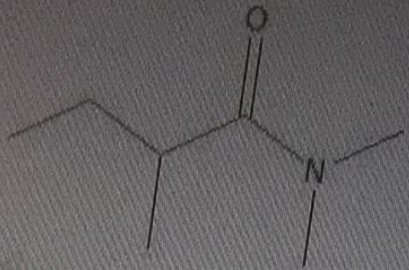
D

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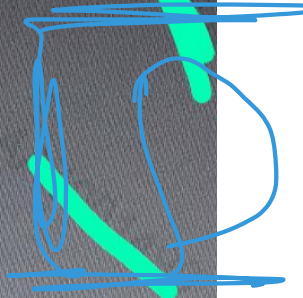
Compaq LE1711

Question No. 38

Which family does the following organic compound belong to?

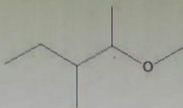


- amine
- ether
- carboxylic acid
- amide



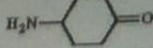
Question No. 2

To which family does the following organic compound belong?



- alcohol
- aldehyde
- carboxylic acid
- ether

D



- ketone and amine
- aldehyde and amine
- aldehyde and ketone
- carboxylic acid and amine

A

Save & Next حفظ و التالي

HP Compaq LE1711

Total questions in exam: 40 | Answered: 27

Question No. 12

Calculate the mass percent composition of phosphorous in K_3PO_4 .

- 30.2 %
- 26.75%
- 55.3 %
- 14.6 %

Save & Next حفظ و التالي

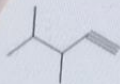
DELL



Total questions in exam: 40 | Answered: 27

Question No. 15

Provide the name of the compound below.



- 2,3-dimethyl-5-pentyne
- 3,4-dimethyl-1-pentyne
- 2,3-dimethyl-4-pentyne
- 3,4-dimethyl-2-pentyne

Save & Next حفظ والتالي

DELL



Total questions in exam: 40 | Answered: 27

Question No. 21

How many moles of cesium (Cs) are contained in 595 kg of cesium?

- 1.26×10^3 moles Cs
- 4.48×10^3 moles Cs
- 7.91×10^4 moles Cs
- 2.23×10^2 moles Cs

Save & Next حفظ والتالي

B

DELL



Total questions in exam: 40 | Answered: 27

Question No. 23

What is the coefficient of chlorine gas after balancing the following equation?
 $_ \text{Fe}(s) + _ \text{Cl}_2(g) \rightarrow _ \text{FeCl}_3(s)$

- 4
- 1
- 3
- 2

Save & Next حفظ والتالي

DELL



Question No. 24

The reaction that requires thermal energy to proceed is known as _____ reaction.

- oxidation
- endothermic
- isothermic
- exothermic

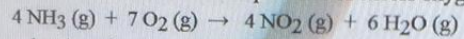
B

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DELL

Total questions in exam: 40 | Answered: 27

Question No. 35

The combustion of ammonia in the presence of excess oxygen yields NO_2 and H_2O :The combustion of 43.9 g of ammonia produces _____ g of NO_2 .

- 43.9
- 2.58
- 119
- 178

Save & Next حفظ والتالي

DELL

Question No. 38

What is the final molarity of H_2SO_4 solution, if 240 mL of 4M H_2SO_4 was diluted to a final volume of 0.5 L?

- 0.96 M
- 1.92 M
- 1.34 M
- 1.60 M

Save & Next حفظ و التالي

User MC4078981

Number of main qu

Number of question

28 Answered

0 Not Visited

1	2	3
8	9	10
15	16	17
22	23	24
29	30	31
36	37	38

B

DELL



Total questions in exam: 40 | Answered: 27

Question No. 20

In an oxidation-reduction reaction, the reduced substance always _____

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

A

حفظ التالي Save & Next

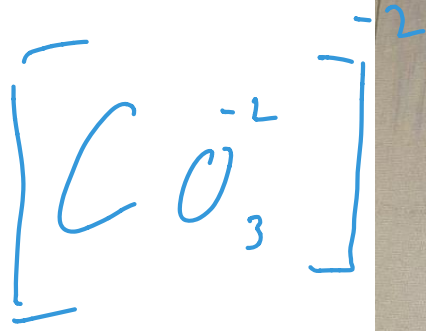
DELL



What is the oxidation number of carbon in CO_3^{2-} ?

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

* صحرى الكنا ت = -2



$$\rightarrow X + (-2 \times 3) = -2$$

$$x - 6 = -2$$

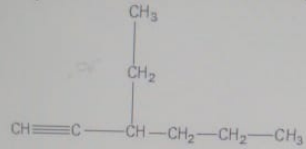
$$x = -2 + 6$$

$$x = +4$$



Question No. 8

What is the correct systematic name of the following compound?



- 4-ethyl-1-hexyne
- 4-ethyl-5-hexyne
- 3-ethyl-1-heptyne
- 3-ethyl-1-hexyne

D

Total questions in exam: 40 | Answered: 27

Question No. 26

The systematic name for the chemical compound Na_2S is:

- sodium sulfide
- sodium(I) sulfide
- sodium(II) sulfide
- sodium monosulfide

Save & Next حفظ واقتلي