SAT Chemistry practice paper Question 1

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Reaction of silver ion with chloride ion in water solution

Select an Answer

A Precipitation

B Oxidation-reduction

C Distillation

D Hydration

E Condensation

Question 2

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Electrolysis of water to form hydrogen and oxygen gases

Select an Answer

A Precipitation

B Oxidation-reduction

C Distillation

D Hydration

E Condensation

Question 3

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Reaction of iron filings with powdered sulfur

Select an Answer

A Precipitation

B Oxidation-reduction

C Distillation

D Hydration

E Condensation

Question 4

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Is weakly acidic

Select an Answer

Α

0.1 M HCI

В

0.1 M NaCl

С

0.1 M HC2H3O2

D

0.1 M CH₃OH

Ε

0.1 M KOH

Question 6

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Has the highest ^{pH}

Select an Answer

Α

0.1 M HCI

В

0.1 M NaCl

 \mathbf{C}

0.1 M HC2H3O2

D

0.1 M CH₃OH

E

0.1 M KOH

Question 7

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Reacts with an equal volume of $^{0.05 \ M}$ Ba(OH)₂ to form a solution with $^{\mathrm{pH} = 7}$

Select an Answer

Α

0.1 M HCI

В

0.1 M NaCl

C

0.1 M HC₂H₃O₂

D

0.1 M CH₃OH

Ε

Question 8

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

A type of ion found in aluminum oxide

Select an Answer

Α

 X^{+}

В

 χ^{2+}

С

 X^{3+}

D

 XO_{3}^{2-}

E

XO₄²⁻

Question 9

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

A type of ion found in potassium phosphate

Select an Answer

 χ^{2+}

XO₃²⁻

XO₄²⁻

Question 10

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

A type of ion found in sodium acetate

Select an Answer

 X^{+}

 χ^{2+}

 χ^{3+}

XO₃²⁻

E XO₄²⁻

Question 11

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Has electrons in ^f orbitals
Select an Answer
A Ar
B O
C S
D Ti
E U

Question 12

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Has the electron configuration $1s^22s^22p^63s^23p^4$

Select an Answer

Α

Αг

В

O

С

S

D Ti

E U

Question 13

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Has the same number of electrons as Ca²⁺

Select an Answer

Α

Αг

В

O

С

S

D Τi

Ε

Question 14

The set of lettered choices below refers to multiple questions. Select the one lettered choice that best fits each statement or answers each question. A choice may be used once, more than once, or not at all in each set.

Is the LEAST chemically reactive

Select an Answer

Α

Αг

В 0

С S

D Τi

Ε U