SAT Chemistry Practice Test 19

SAT Chemistry Practice Test 3: Part A

1. Is the third most abundant gas in Earth's atmosphere

A. Carbon

B. Nitrogen

C. Oxygen

D. Neon

E. Argon

2. At standard conditions, has an allotrophic form that is a good electrical conductor

A. Carbon

B. Nitrogen

C. Oxygen

D. Neon

E. Argon

3. Regardless of its electron configuration, it must always be paramagnetic when it's a single, neutrally charged atom

A. Carbon

B. Nitrogen

C. Oxygen

D. Neon

E. Argon

4. The key element delivered in soil fertilizer

A. Carbon

B. Nitrogen

C. Oxygen

D. Neon

E. Argon

5. Allotrope of this element is the primary absorber of UV solar radiation in Earth's atmosphere

A. Carbon

B. Nitrogen

C. Oxygen

D. Neon

E. Argon

6. A conjugate acid/base pair with differing spectral absorbencies

A. Chemical pH indicator

B. Acid/base buffer

C. Anhydrous solution

D. Hypotonic solution

E. Supersaturated solution

7. An example of a solution not in equilibrium

A. Chemical pH indicator

B. Acid/base buffer

C. Anhydrous solution

D. Hypotonic solution

E. Supersaturated solution

8. Term used in reference to an aqueous solution's osmotic pressure

A. Chemical pH indicator

B. Acid/base buffer

C. Anhydrous solution

D. Hypotonic solution

E. Supersaturated solution

9. Addition of water to this solution will not change $[H_3O^+]$

A. Chemical pH indicator

B. Acid/base buffer

C. Anhydrous solution

D. Hypotonic solution

E. Supersaturated solution

10. Increased with the addition of a catalyst

A. Standard voltaic potential

B. Entropy

C. Enthalpy

D. Reaction rate

E. Gibbs free energy

11. Abbreviated as H

A. Standard voltaic potential

B. Entropy

C. Enthalpy

D. Reaction rate

E. Gibbs free energy

12. A property that must decrease when a gas condenses into a liquid

A. Standard voltaic potential

B. Entropy

C. Enthalpy

D. Reaction rate

E. Gibbs free energy

13. Is always positive for a spontaneous chemical reaction

A. Standard voltaic potential

B. Entropy

C. Enthalpy

D. Reaction rate

E. Gibbs free energy

14. Is zero for a crystalline solid that is elementally pure at 0 K

A. Standard voltaic potential

B. Entropy

C. Enthalpy

D. Reaction rate

E. Gibbs free energy

15. The most unreactive family of elements

A. Alkali metals

B. Alkaline earth metals

C. Noble gases

D. Halogens

E. Transition metals

16. Form negative ions in an ionic bond

A. Alkali metals

B. Alkaline earth metals

C. Noble gases

D. Halogens

E. Transition metals

17. Consist of atoms that have valence electrons in a *d* subshell

A. Alkali metals

B. Alkaline earth metals

C. Noble gases

D. Halogens

E. Transition metals

18. Exist as diatomic molecules at room temperature

A. Alkali metals

B. Alkaline earth metals

C. Noble gases

D. Halogens

E. Transition metals

19. Members possess the lowest first ionization energy in their respective period

A. Alkali metals

B. Alkaline earth metals

C. Noble gases

D. Halogens

E. Transition metals

20. A product of a neutralization of a strong acid with a strong base

A. N_2

B. KI

C. CCl_4

D. $AgNO_3$

E. $CaCO_3$

21. A volatile covalent liquid at 25°C and 1 atm

A. N_2

B. KI

C. CCl_4

D. $AgNO_3$

E. $CaCO_3$

22. Releases a gas with the addition of dilute acid

A. N_2

B. KI

C. CCl_4

D. $AgNO_3$

E. $CaCO_3$

23. Forms a white precipitate when added to a solution of NaCl

A. N_2

B. KI

C. CCl_4

D. $AgNO_3$

E. $CaCO_3$