Chem. G11-Q3W8-Quarter revision-Quarter Exam

Multiple Choice

Identify the choice that best completes the statement or answers the question.

 1.	. Fractional distillation of petroleum works because the components all have different					
	a. boiling points	c.	molecular structures			
	b. melting points	d.	chemical properties			
 2. Acids produce in order to conduct electricity in water.						
	a. H ⁺		H_3O^+			
	b. H ₂ O	d.	OH			
 3.	In the electrolysis of potassium bromide, bromi	ine a	appears at the			
	a. anion	c.	cation			
	b. anode	d.	cathode			
 4.	The type of acid-base reaction that always goes	to o	completion is the reaction between			
	a. a strong acid and a strong base	c.	a weak acid and a strong base			
	b. a strong acid and a weak base	d.	a weak acid and a weak base			
 5.	During respiration, what element is reduced?					
	a. carbon	c.	hydrogen			
	b. oxygen	d.	magnesium			
 6.	One disadvantage of nickel-cadmium batteries	that	improved technology cannot overcome is the			
	a. size	c.	cost			
	b. toxicity of cadmium	d.	power limitations			
 7.	A strip of magnesium is placed in a silver nitra	te so	olution, and a strip of silver is placed in a solution of			
	magnesium chloride. In which case will a react	ion	take place?			
	a. silver in magnesium chloride	c.	magnesium in silver nitrate			
	b. Both will react.	d.	Neither will react.			
 8.	In the equation, $2K^+ + 2Cl^- \rightarrow 2K(l) + Cl_2(g)$, w	vhat	is the cation?			
	a. K ⁺	c.	Cl ₂			
	b. Cl ⁻	d.	K			
 9.	All of the following are biochemical redox prod	cess	es except			
	a. corrosion	c.	photosynthesis			
	b. respiration	d.	bioluminescence			
 10.	The size of an electrical current depends on		potential difference.			
	a. whether there is a	c.	the source of the			
	b. the direction of the	d.	the size of the			
 11.	One type of experimental battery for electric ca	ırs u	ses the active metal			
	a. sodium	c.	rubidium			
	b. lithium	d.	potassium			
 12.	The properties of the makes a dry cell "d	lry.'				
	a. electrolyte	c.	casing			
	b. anode	d.	cathode			
 13.	An oxidation reaction occurs only in the presen	ice o	of			
	a. a metal	c.	hydrogen			
	b. oxygen	d.	a reduction reaction			

14.	Acids react with carbonates to produce					
	a. hydrogen	c.	a base			
	b. a hydronium ion	d.	carbon dioxide			
15.	15. A device used to measure the flow of current in a cell is the					
	a. cathode		voltmeter			
	b. anode	d.	salt bridge			
16.	The weak acid in the following list is		C			
10.	a. nitric acid	c.	acetic acid			
	b. hydrochloric acid		sulfuric acid			
17.	-		e electroplating process, the anode is made of			
17.	a. an electrolyte		carbon			
	b. copper		the object itself			
10			•			
10.	18. In electrolysis, which reaction—oxidation or reduction—occurs at a faster rate? a. oxidation c. It depends on the reaction.					
	b. reduction		They occur at the same rate.			
10			•			
19.	The total number of possible different kinds of					
	a. 4	с.				
•	b. 3	d.				
20.	Using an electrical current to break molten bau	ixite	, Al_2O_3 , into aluminum metal and a gas is an example of			
	, ,		12			
	a. a cathode		recycling			
	b. electrolysis		an anode			
21.						
	a. Pb ⁴⁺		Pb ²⁺			
	b. Pb		H_2SO_4			
22.	The reaction between an acid and a base alway					
	a. a basic anhydride		an acid anhydride			
	b. a spectator ion	d.	a salt			
23.	· · /					
	a. half-reaction		loss of electrons			
	b. agent	d.	redox reaction			
24.	The effect of antacid on stomach fluids is to					
	a. make them basic	c.	decrease their pH			
	b. make them neutral	d.	increase their pH			
25.	Chemiluminescent reactions release					
	a. light	c.	gases			
	b. odors	d.	heat			
26.	When an element is reduced, its oxidation num	ıber				
	a. increases		decreases			
	b. stays the same	d.	may increase or decrease			
27.	· · · · · · · · · · · · · · · ·					
/	a. less than 7	c.	7 or below			
	b. 7 or above		more than 7			
28.	The flow of electrons in a particular direction i					
20.	a. reduction		electrolysis			
	b. oxidation	d.				

29.	An example of a cation is				
	a. Na		Cl		
	b. Na ⁺	d.	Cl_2		
30.	In the equation, $2K^+ + 2Cl^- \rightarrow 2K(l) + Cl_2(g)$, what is produced at the anode?				
	a. Cl	c.	К		
	b. Cl_2	d.	\mathbf{K}^+		
31.	In a galvanic cell, the electrode that is more easily oxidized is the				
	a. anion	c.	anode		
	b. cathode	d.	cation		
32.	The best way to represent water in an ionic equation is as				
	a. $H^+(aq) + OH^-(aq)$		$H^+ + OH^-$		
	b. $H_2O(1)$	d.	$H_2O(aq)$		
33.	For every oxidation reaction that occurs, a	r	eaction must also take place.		
	a. combustion	c.	reduction		
	b. decomposition	d.	synthesis		
34.	In the equation, $2K^+ + 2Cl^- \rightarrow 2K(l) + Cl_2(g)$,	what	t is produced at the cathode?		
	a. K ⁺		ĸ		
	b. Cl ⁻	d.	Cl_2		
35.	The substance that is oxidized in the reaction F	Fe ₂ O	$h_3 + 2AI \rightarrow Al_2O_3 + 2Fe$ is .		
	a. Fe		Al		
	b. Fe_2O_3	d.	Al_2O_3		
36.					
	a. \mathbf{K}^+	c.	Cl_2		
	b. K	d.	Cl		
37.	The purpose of adding cryolite (Na ₃ AlF ₆) in th	e pr	ocess of extracting aluminum from bauxite is to		
	a. provide a source of fluorine	c.	provide an electrolyte lower the melting point of bauxite		
	b. provide a source of aluminum	d.	lower the melting point of bauxite		
38.	When two halves of a spontaneous redox reaction are separated and made to transfer electrons through a wire,				
	a(n) is formed.				
	a. anode	c.	battery		
	b. half-cell	d.	cathode		
39.	1 0	e is n	nost likely to have an outer coating of		
	a. silver metal		hydrogen sulfide		
	b. silver oxide	d.	silver sulfide		
40.	Oxides of nitrogen and sulfur are				
	a. acidic anhydrides	c.	bases		
	b. acids	d.	basic anhydrides		
