SASKATCHEWAN CHEMISTRY 30 · FINAL EXAM · 50 QUESTIONS

Final Exam — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A substance has molar mass 18 g per mole. The amount in 36 g of it, in moles, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A substance has molar mass 16 g per mole. The mass of 2 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **At equilibrium, the concentration of a product is 0.8 moles per litre and of a reactant is 0.4 moles per litre for a reaction with equal coefficients. The equilibrium constant is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The hydrogen ion concentration is 1×10^{-3} moles per litre . The pH is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A voltage of 12 V is applied across a resistance of 6 ohms. The current, in amperes, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A substance has molar mass 44 g per mole. The amount in 88 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A substance has molar mass 16 g per mole. The amount in 32 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **At equilibrium, the concentration of a product is 1.2 moles per litre and of a reactant is 0.6 moles per litre for a reaction with equal coefficients. The equilibrium constant is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **The hydrogen ion concentration is $1 \times 10^{-}1$ moles per litre . The pH is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A measure of how easily a species gains electrons is called**

A standard reduction potential

B reduction

C oxidizing agent

D reducing agent

Understand It with Pulse | Flag a mistake

11 **A substance has molar mass 18 g per mole. The mass of 2 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **A substance has molar mass 30 g per mole. The mass of 3 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **At equilibrium, the concentration of a product is 0.5 moles per litre and of a reactant is 0.25 moles per litre for a reaction with equal coefficients. The equilibrium constant is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **The hydrogen ion concentration is $1 \times 10^{-}5$ moles per litre . The pH is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **Gain of electrons is called**

A reducing agent

B anode

C reduction

D cathode

Understand It with Pulse | Flag a mistake

16 **A covalent bond with unequal sharing of electrons is called**

A intermolecular force

B hydrogen bond

C polar bond

D VSEPR theory

Understand It with Pulse | Flag a mistake

17 **A hydrocarbon with at least one triple bond is called**

A alcohol

B alkyne

C carboxylic acid

D polymer

Understand It with Pulse | Flag a mistake

18 **A solution holding the largest amount of dissolved solute at a given temperature is called**

A stress

B saturated solution

C dynamic equilibrium

D precipitate

Understand It with Pulse | Flag a mistake

19 **An acid that ionizes only partly in water is called**

A buffer

B weak acid

C titration

D equivalence point

Understand It with Pulse | Flag a mistake

20 **Oxidation is defined as**

A gain of electrons

B loss of electrons

C loss of protons

D gain of neutrons

Understand It with Pulse | Flag a mistake

21 **Metallic bonding explains why metals**

A are brittle always

B conduct electricity

C dissolve in water

D are gases

Understand It with Pulse | Flag a mistake

22 **The suffix ene shows a hydrocarbon is an**

A alkane

B alkyne

C acid

D alkene

Understand It with Pulse | Flag a mistake

23 **Adding more reactant to a system at equilibrium shifts it toward**

- A reactants
- B neither side
- C a catalyst
- D products

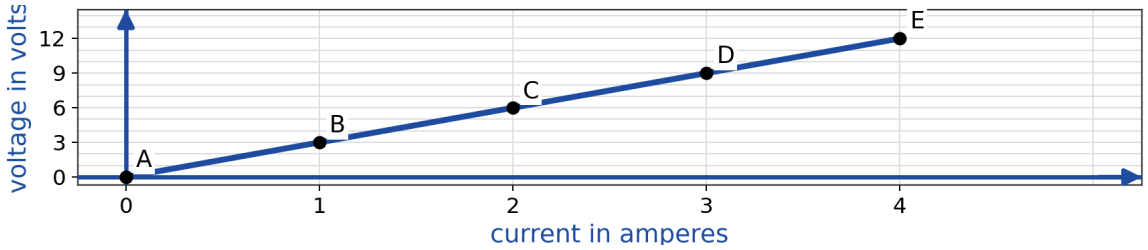
Understand It with Pulse | Flag a mistake

24 **Neutralization of hydrochloric acid with sodium hydroxide produces**

- A sodium chloride and water
- B only hydrogen gas
- C only oxygen
- D only salt with no water

Understand It with Pulse | Flag a mistake

25 **The graph shows voltage against current for a cell. The voltage at 2 amperes is _____**



ANSWER

Understand It with Pulse | Flag a mistake

26 **A strong attraction between hydrogen and nitrogen, oxygen or fluorine is called**

A Lewis structure

B ionic bond

C covalent bond

D hydrogen bond

Understand It with Pulse | Flag a mistake

27 **An organic compound with a carboxyl group is called**

A isomer

B organic compound

C carboxylic acid

D hydrocarbon

Understand It with Pulse | Flag a mistake

28 **Equilibrium where reactions continue in both directions at equal rates is called**

A common ion effect

B equilibrium

C dynamic equilibrium

D equilibrium constant

Understand It with Pulse | Flag a mistake

29 **A method that finds concentration using a measured reaction is called**

A indicator

B acid

C titration

D base

Understand It with Pulse | Flag a mistake

30 **A current of 4 A flows through a resistance of 5 ohms. The voltage, in volts, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

31 **A representation showing valence electrons and bonds in a molecule is called**

A covalent bond

B Lewis structure

C metallic bond

D electronegativity

Understand It with Pulse | Flag a mistake

32 **A hydrocarbon with at least one double bond is called**

A functional group

B alcohol

C carboxylic acid

D alkene

Understand It with Pulse | Flag a mistake

33 **Adding sodium chloride to a saturated silver chloride solution lowers the solubility of the silver chloride. This phenomenon is called the**

A common ion effect

B equilibrium constant

C Le Chatelier principle

D solubility

Understand It with Pulse | Flag a mistake

34 **A substance that changes colour over a pH range is called**

A indicator

B base

C pH

D strong acid

Understand It with Pulse | Flag a mistake

35 **A voltage of 18 V is applied across a resistance of 9 ohms. The current, in amperes, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

36 **A substance has molar mass 58.5 g per mole. The mass of 3 moles of it, in grams, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

37 **A substance has molar mass 60 g per mole. The mass of 4 moles of it, in grams, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

38 **A solution contains 2 moles of solute in 4 L of solution. Its concentration, in moles per litre, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

39 **The hydrogen ion concentration is $1 \times 10^{-}7$ moles per litre . The pH is _____**

ANSWER

Understand It with Pulse | Flag a mistake

40 **A voltage of 20 V is applied across a resistance of 4 ohms. The current, in amperes, is _____**

ANSWER

Understand It with Pulse | Flag a mistake

41 **A substance has molar mass 100 g per mole. The mass of 2 moles of it, in grams, is _____**

ANSWER

Understand It with Pulse | Flag a mistake

42 **A substance has molar mass 72 g per mole. The mass of 3 moles of it, in grams, is _____**

ANSWER

Understand It with Pulse | Flag a mistake

43 **A solution of concentration 2 moles per litre and volume 1 L is diluted to 4 L. The new concentration, in moles per litre, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

44 **The hydrogen ion concentration is $1 \times 10^{-}9$ moles per litre . The pH is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

45 **The substance with the higher reduction potential is more likely to be**

A reduced

B oxidized

C unchanged

D a salt bridge

Understand It with Pulse | Flag a mistake

46 **A substance has molar mass 44 g per mole. The mass of 5 moles of it, in grams, is ____**

ANSWER

Understand It with Pulse | Flag a mistake

47 **A substance has molar mass 30 g per mole. The mass of 2 moles of it, in grams, is ____**

ANSWER

Understand It with Pulse | Flag a mistake

48 **A solution contains 5 moles of solute in 10 L of solution. Its concentration, in moles per litre, is ____**

ANSWER

Understand It with Pulse | Flag a mistake

49 **The hydrogen ion concentration is 1×10^{-11} moles per litre . The pH is ____**

ANSWER

Understand It with Pulse | Flag a mistake

50 **A current of 1 A flows through a resistance of 9 ohms. The voltage, in volts, is ____**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	2	**18.**	B	**35.**	2
2.	32	**19.**	B	**36.**	175.5
3.	2	**20.**	B	**37.**	240
4.	3	**21.**	B	**38.**	0.5
5.	2	**22.**	D	**39.**	7
6.	2	**23.**	D	**40.**	5
7.	2	**24.**	A	**41.**	200
8.	2	**25.**	6	**42.**	216
9.	1	**26.**	D	**43.**	0.5
10.	A	**27.**	C	**44.**	9
11.	36	**28.**	C	**45.**	A
12.	90	**29.**	C	**46.**	220
13.	2	**30.**	20	**47.**	60
14.	5	**31.**	B	**48.**	0.5
15.	C	**32.**	D	**49.**	11
16.	C	**33.**	A	**50.**	9
17.	B	**34.**	A		

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