PRINCE EDWARD ISLAND CHEMISTRY 12 · UNIT D

Electrochemistry — Practice Test

Prince Edward Island Chemistry 12 • 25 questions

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 galvanic cell has cathode potential 0.34 volts and anode potential -0.76 volts. The cell potential in volts is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A galvanic cell has cathode potential 0.8 volts and anode potential -0.44 volts. The cell potential in volts is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A galvanic cell has cathode potential 0.0 volts and anode potential -0.76 volts. The cell potential in volts is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **In a galvanic cell, oxidation occurs at the**

- A anode
- B cathode
- C salt bridge
- D voltmeter

Understand It with Pulse | Flag a mistake

5 **In a galvanic cell, reduction occurs at the**

- A anode
- B salt bridge
- C external wire only
- D cathode

Understand It with Pulse | Flag a mistake

6

The salt bridge in a galvanic cell

A is the cathode

B measures voltage

C maintains charge balance

D provides electrons

Understand It with Pulse | Flag a mistake

7

A positive cell potential indicates a reaction that is

A impossible

B spontaneous

C nonspontaneous

D at equilibrium

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8 **Electrolysis uses electrical energy to drive a**

A nonspontaneous reaction

B spontaneous reaction

C neutralization

D combustion

Understand It with Pulse | Flag a mistake

9 **In electrolysis, the anode is the electrode where**

A reduction occurs

B electrons are produced by reduction

C no reaction occurs

D oxidation occurs

Understand It with Pulse | Flag a mistake

10 **The standard hydrogen electrode is assigned a potential of**

A -1 volt

B 0.34 volts

C 0 volts

D 1 volt

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11 **A stronger reducing agent is more easily**

A neutralized

B oxidized

C reduced

D precipitated

Understand It with Pulse | Flag a mistake

12 **Corrosion of iron is an example of**

A electrochemical oxidation

B neutralization

C precipitation

D combustion only

Understand It with Pulse | Flag a mistake

13 **A cell with cathode potential 0.52 volts and anode potential -0.28 volts has cell potential in volts**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **Zinc metal has an oxidation number of 0 as an element. In zinc ion with charge 2 plus, the oxidation number is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **Oxygen usually has oxidation number -2 in compounds. In water, hydrogen has oxidation number**

ANSWER

Understand It with Pulse | Flag a mistake

16 **A galvanic cell produces 2 volts and a current of 3 amperes. The power in watts is**

ANSWER

Understand It with Pulse | Flag a mistake

17 **An electrolytic cell runs at 2 amperes for 100 seconds. The charge in coulombs is**

ANSWER

Understand It with Pulse | Flag a mistake

18 **A cell potential of 1.5 volts for a reaction with 2 electrons transferred gives, using 96500 coulombs per mole, a charge per mole of reaction in coulombs of**

ANSWER

Understand It with Pulse | Flag a mistake

19 **Iron in iron 3 plus ion has oxidation number**

ANSWER

Understand It with Pulse | Flag a mistake

20 **Copper in copper 2 plus ion has oxidation number**

ANSWER

Understand It with Pulse | Flag a mistake

21 **A cell with cathode potential 0.20 volts and anode potential -0.40 volts has cell potential in volts**

ANSWER

Understand It with Pulse | Flag a mistake

22 **An electrolytic cell runs at 5 amperes for 20 seconds. The charge in coulombs is**

ANSWER

Understand It with Pulse | Flag a mistake

23 **A galvanic cell produces 3 volts and a current of 2 amperes. The power in watts is**

ANSWER

Understand It with Pulse | Flag a mistake

24 **Aluminium in aluminium 3 plus ion has oxidation number**

ANSWER

Understand It with Pulse | Flag a mistake

25 **Magnesium in magnesium 2 plus ion has oxidation number**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	1.1	**10.**	C	**19.**	3
2.	1.24	**11.**	B	**20.**	2
3.	0.76	**12.**	A	**21.**	0.6
4.	A	**13.**	0.8	**22.**	100
5.	D	**14.**	2	**23.**	6
6.	C	**15.**	1	**24.**	3
7.	B	**16.**	6	**25.**	2
8.	A	**17.**	200		
9.	D	**18.**	193000		

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