Chemical Effect of Electric Current

Check Your Concepts

Q.1. *Match the following*:

Directions: *Given below are two columns - column I and column II. Match the two columns and write the correct answer in the given blank grid.*

1. Match the following:

Column - I (Sound)		Column – II (Decibel level)	
(A)	Positive terminal	**(i)**	Cathode
(B)	Electrolyte	**(ii)**	Metals
(C)	Negative terminal	**(iii)**	Salts
(D)	Bad conductor	**(iv)**	Wood
(E)	Good conductor	**(v)**	Anode

Q.2. *Fill in the blanks*:

Directions: *Complete the following statements with an appropriate word / term to be filled in the blank space(s).*

1. Glass does not allow _____ to flow through it.

2. Inside a cell the conventional current flows from the _____ terminal to the _____ terminal.

3. _____ does not conduct electricity.

4. The process of coating an inexpensive conductor with a metal is called _____.

5. An electrode connected to the negative terminal is called _____.

6. Nichrome is used as a heating element as it has _____.

7. An electroscope is used to find the type of _____ present on a body.

8. The passage of an electric current through a solution causes _____ effects.

9. The types of cells in which it is possible to restore the chemicals are called _____.

10. Acid are _____ conductor of electricity.

Q.3. *True / False*:

Directions: *Read the following statements and mark your response as true or false. Rewrite the correct statement(s) in the box provided below, in case of false statement(s).*

1. Electricity and magnetism are two separate branches of physics which are not related to each other. **[ ]**

2. During electrolysis negative terminal used is called anode. **[ ]**

3. Human body is good conductor of electricity. **[ ]**

4. All gases are bad conductors electricity. **[ ]**

5. Positive ions are called anions. **[ ]**

6. In a neutral body, the amount of positive charge is equal to the amount of negative charge. **[ ]**

7. To protect buildings from lightning a good conductor of electricity like a copper rod is used. **[ ]**

8. An uncharged gold leaf electroscope can detect the nature of charge present on a charged body. **[ ]**

9. When bulbs are connected in series, the same current flows through them. **[ ]**

10. Charge of an electron $\left(\bar{e}\right) = -1.620 \times 10^{-19}$ Coulomb. **[ ]**

Q.4. *Multiple choice questions*:

Directions: *Read the following questions and choose the answer that best answer the questions.*

1. Potential difference is measured in

(a) Ohm (b) Coulomb (b) Ampere (d) Volt

2. Current is the flow of

(a) Matter (b) Electrons (b) Protons (d) Charge

3. Rate of flow of charge is called

(a) Voltage (b) Resistance (c) Current (d) Conductance

4. Insulators

(a) Conduct electricity at room temperature.

(b) Conduct electricity only at low temperature.

(c) Do not conduct electricity.

(d) Conduct electricity.

5. Charge can flow from one place to another

(a) Only through electrons. (b) Only through protons.

(c) Through electrons, protons and ions. (d) Only through negative charge carriers.

6. A cell converts

(a) Electrical energy into chemical energy. (b) Chemical energy into electrical energy.

(c) Magnetic energy into electrical energy. (d) Electrical energy into mechanical energy.

7. Copper electrode

(a) Donates electrons to hydrogen ions (b) Accepts electrons from hydrogen ions

(c) Donate electrons to sulphate ions (d) Accepts electrons from sulphate ions

8. Switch is used to

(a) Open an electric circuit (b) Increase electric voltage in a circuit

(c) Decrease the voltage in the circuit (d) Open and close an electric circuit

Q.5. ***Subjective questions*:**

1. Metals are good conductor of electricity but wood and plastic are bad conductor of electricity. Why?

Ans. …….

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2. What do you mean by LED. Describe briefly its structure.

Ans. …….

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3. Why natural water is good conductor of electricity but distilled water is poor conductor of electricity?

Ans. …….

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4. (a) What do you understand by electroplating?

(b) Give important uses of electroplating.

Ans. ……

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5. What do you understand by electrodes? Explain.

Ans. ……

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6. (a) Name the material used for making the connecting wires. Give reason in support of your answer.

(b) Name the instrument used to detect current in a circuit.

Ans. ……

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7. What do you understand by electrolysis of water?

Ans. ……

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8. (i) What do you mean by an electric circuit diagram?

(ii) Give symbols of an electric cell and battery of cells.

Ans. ……

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9. How electric current are produced?

Ans. ……

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