

# **CLASS-IX Chemical Effects of Electric Current**

#### Question 1.

The negative charged ions are called:

- (a) cations
- (b) anions
- (c) ions
- (d) none of these

# **▼** Answer

(a) cations

Anions are negative charged ions.

# Question 2.

Kerosene is:

- (a) electrolyte
- (b) non-electrolyte
- (c) electrode
- (d) none of these

#### ▼ Answer

(a) electrolyte

Kerosene is non-electrolyte.

## Question 3.

Magnetic compass connected In a circuit is used to check:

- (a) magnetism in electric current
- (b) slow current
- (c) small current
- (d) none of these

## **▼** Answer

(c) small current

Magnetic compass connected in a circuit is used to check small current.

# Question 4.

LED glows:

- (a) when a strong electric current flows through it
- (b) whenever a weak electric current flows through it
- (c) when no electric current flows through it
- (d) none of these

(b) whenever a weak electric current flows through it

LED glows when even a weak electric current flows through it.

#### Question 5.

Which of the following is a good conductor of electricity:

- (a) istilled water
- (b) tap water
- (c) kerosene
- (d) none of these

#### **▼** Answer

(b) tap water

Tap water is a good conductor of electricity.

# Ouestion 6.

When current flows through a conducting solution than the electrode connected to the negati'wc terminal of the battery is called :

- (a) anode
- (b) cathode
- (c) rod
- (d) none of these

#### **▼** Answer

(b) cathode

Cathode is the electrode connected to the negative terminal of the battery.

- (a) anode
- (b) cathode
- (c) rod
- (d) none of these

#### ▼ Answer

(a) anode

Anode is the electrode connected to the positive terminal of the battery.

#### Question 7.

Current is the flow of:

- (a) electrons
- (b) protons
- (c) neutrons
- (d) none of these

#### ▼ Answer

(a) electrons

Current is the flow of electrons.

# Question 8.

A battery is used to:

- (a) convert chemical current into electric
- (b) maintain a potential difference current
- (c) measure the current
- (d) measure the temperature

#### ▼ Answer

(a) convert chemical current into electric

A battery is used to convert chemical current into electric current.

#### Ouestion 9.

When electric current is passed through the copper sulphate solution, copper sulphate dissociates into:

- (a) copper and sulphur
- (b) copper and oxygen
- (c) copper and sulphate
- (d) none of these

## **▼** Answer

(c) copper and sulphate

On passing electric current through the copper sulphate solution, copper sulphate dissociates into copper and sulphate.

#### Question 10.

The cans, used for storing food, are made by electroplating ...... on to irons

- (a) chromium
- (b) zinc
- (c) tin
- (d) none of these

#### ▼ Answer

(c) tin

The cans, used for storing food, are made by electroplating tin onto iron.

#### Question 11.

..... is deposited on Iron used in bridges and automobiles to protect it from corrosion and formation of rust.

- (a) Chromium
- (b) Zinc
- (c) lin
- (d) None of these

# (b) Zinc

Zinc is deposited on iron used in bridges and automobiles.

#### Question 12.

Car parts, bath taps, kitchen gas burners, bicycle handlebars arc electroplated with:

- (a) chromium
- (b) zinc
- (c) tin
- (d) none of these

#### **▼** Answer

# (a) chromium

Carparks, bath taps, kitchen gas burners, bicycle handle bars are electroplated

# Ouestion 13.

A tester is used to check the conduction of electricity through two liquids, labelled A and B. It is found that the bulb of the tester glows brightly for liquid. A white it glows very dimly for liquid H. You would conclude that:

- (a) liquid A is a better conductor than liquid B
- (b) liquid B is a better conductor than liquid A
- (c) both liquids are equally conducting
- (d) conducting properties of liquid cannot be compared in this manner

#### ▼ Answer

(a) liquid A is a better conductor than liquid B Liquid A is a better conductor than liquid B.

## Question 14.

Which one is the conductor

- (a) brass
- (b) plastic
- (c) mica
- (d) leather

#### **▼** Answer

#### (a) brass

Brass is the conductor, plastic, mica and leather are insulators.

# Question 15.

The process in which a chemical change takes place in a substance, when electric current is passed through it is called:

- (a) electrolysis
- (b) electrodes

- (c) thermal conduction
- (d) none of these

#### (a) electrolysis

The process in which chemical change takes place in a substance when electric current is passed through it is called electrolysis.

# Question 16.

Electroplating is a process which is:

- (a) magnetic effect of electricity
- (b) heating effect of electricity
- (c) chemical effect off electricity
- (d) none of these

#### **▼** Answer

# (c) chemical effect off electricity

Electroplating is a process which is chemical effect of electricity.

#### Ouestion 17.

Which of the fallowing liquid is poor conductor:

- (a) salty water
- (b) orange juice
- (c) lemon juice
- (d) none of these

# **▼** Answer

# (a) salty water

Salty water, orange juice and lemon juice, all are good conductors.

#### Ouestion 18.

The substance which is conductor of electricity is:

- (a) rubber
- (b) paper
- (c) nails
- (d) plastic

# ▼ Answer

# (c) nails

Nails (iron) is conductor of electricity, whereas member, paper and plastic are poor conductor

# Question 19.

We use magnetic needle to find the effect of:

- (a) slow electric current
- (b) small electric current
- (c) magnetism
- (d) none of these

(b) small electric current

Magnetic needle is used to find the effect of small electric current.

#### Ouestion 20.

If a switch has some sparking, we will switch it off with the help of:

- (a) an iron nail
- (b) cotton cloth
- (c) wooden stick
- (d) any of (b) and (c)

#### **▼** Answer

(d) any of (b) and (c)

Cotton cloth or wooden stick can be used to switch off the switch if it has some parking

#### Ouestion 21.

During electroplating in CuSO<sub>4</sub>, (Copper sulphate) solution ...... will get deposit on electrode at negative terminal.

- (a) Copper from positive electrode
- (b) Sulphur
- (c) Copper from CuSO<sub>4</sub>, solution
- (d) None of these

#### ▼ Answer

(c) Copper from CuSO<sub>4</sub>, solution

During electroplating in CuSO<sub>4</sub> (copper sulphate) solution copper from CuSO<sub>4</sub> solution will get deposited on electrode at negative terminal.

#### Question 22.

Electroplating is a method of:

- (a) making plates
- (b) coating a metal on another metal using electric current
- (c) making plates which use electricity
- (d) making a metal with another metal

#### ▼ Answer

(b) coating a metal on another metal using electric current Electroplating is a method of coating a metal on another metal using electric current.

# Question 23.

Which one of the following is the insulator:

- (a) human body
- (b) paper
- (c) acid
- (d) steel

#### **▼** Answer

# (b) paper

Paper is insulator whereas human body, acid and steel are conductors.

# Question 24.

Which liquid do not conduct electricity?

- (a) common salt solution
- (b) acidic solution
- (c) distilled water
- (d) none of these

#### **▼** Answer

## (c) distilled water

Distilled water do not, conduct electricity. Common salt solution and acidic solution conduct electricity.

#### Question 25.

An electrolyte is:

- (a) a metal
- (b) a solution
- (c) a liquid that conducts electricity
- (d) none of these

#### ▼ Answer

# (c) a liquid that conducts electricity

An electrolyte is a liquid that conducts electricity.

# Question 26.

Adding lime water to tap water makes it:

- (a) an electrolyte
- (b) electrolysis
- (c) no change occur
- (d) none of these

## **▼** Answer

# (a) an electrolyte

Adding lime water to tap water makes it an electrolyte.

Question 27.

The positive charged ions are called:

- (a) cations
- (b) anions
- (c) ions
- (d) none of these

# **▼** Answer

(a) cations

Cations are positive charged ions.

# Match the Column-A with Column-B:

# Question 1.

Column-A	Column-B
(a) Copper allows electric current to pass through it easily	(i) copper
"In I Madina come cair in dictilled Water makes it	(ii) because they are insulators
(c) Plastics are used to make handles of electric appliances	(iii) a conductor
(d) It is used to make electric wires	(iv) a conductor

# **▼** Answer

Column-A	Column-B
(a) Copper allows electric current to pass through it easily	(iv) a conductor
(b) Adding some salt in distilled water makes it	(iii) a conductor
	(ii) because they are insulators
(d) It is used to make electric wires	(i) copper

# Question 2.

Column-A	Column-B
(a) Path through which electric current passes	(i) confirms the flow of current
(b) The filament of the bulb glows	(ii) electroplating
(c) Deflection in magnetic compass	(iii) electric circuit.
(d) Coating of silver and gold on jewellery made from less expensive metals	(iv) due to heating effect of electrical circuit

Column-A	Column-B
(a) Path through which electric current passes	(iii) electric circuit
(b) The filament of the bulb glows	(iv) due to heating effect of electrical circuit
(c) Deflection in magnetic compass	(i) confirms the flow of current
(d) Coating of silver and gold on jewellery made from less expensive metals	(ii) electroplating

# Question 3.

Column-A	Column-B
(a) Positive ion	(i) Insulator
(b) Negative ion	(ii) Conductor
(c) Tap water	(iii) Cations
(d) Wood	(iv) Anions

# **▼** Answer

Column-A	Column-B
(a) Positive ion	(iii) Cations
(b) Negative ion	(iv) Anions
(c) Tap water	(ii) Conductor
(d) Wood	(i) Insulator

# State whether the following statements are True or False:

# Question 1.

Pure water is good conductor of electricity.

# **▼** Answer

False

# Question 2.

Bodies of human beings and animals are insulators of electricity.

# **▼** Answer

False

Question 3. Electroplating of nickel and chromium on clean iron surface is done by employing the heating effect of current.
▼ Answer
False
Question 4. Distilled water is an insulator.
▼ Answer
True
Question 5. Electrolyte is a substance which produces ions in a solution.
▼ Answer
True
Question 6. Anode is the electrode which is connected to the negative terminal of the battery.
▼ Answer
False
Question 7. Kerosene is an electrolyte.
▼ Answer
False
Question 8. Leather is a good conductor of electricity.
▼ Answer
False
Question 9. Addition of sodium hydroxide in distilled water makes it non-electrolyte.

False
Question 10. On passing current in water, bubbles of oxygen are formed on the electrode connected to the positive terminal of the battery.
▼ Answer
True
Question 11. Petrol is agood conductor of electricity.
▼ Answer
False
Question 12. All vegetable oils are non-electrolytes.
▼ Answer
True
Question 13. Electroplating is heating effect of electric current.
▼ Answer
False
Question 14. On passing electric current through the copper sulphate solution, it dissociates into copper and sulphate.
▼ Answer
True
Fill in the blanks:
Question 1. An electric lamp glows due to effect of electric current.
▼ Answer
heating

Question 2. Materials which do not allow an electric current to pass through them are called
▼ Answer
insulators
Question 3. Handles of doors are coated with to give them lustre.
▼ Answer
chromium
Question 4. Electrolysis occur when the electrolyte is in the state.
▼ Answer
liquid
Question 5. Addition of caustic soda in distilled water makes it an
▼ Answer
electrolyte
Question 6.  Most liquids that conduct electricity are solutions of
▼ Answer
acids, bases and salts
Question 7. The passage of an electric current through a solution causes effect.
▼ Answer
chemical
Question 8.  If you pass current through copper sulphate solution, copper gets deposited on the plate connected to the terminal of the battery.

negative
Question 9. The process of depositing a layer of any desired metal on another metallic object, by means of electricity, is called
▼ Answer
electroplating
Question 10.  Materials which allow an electric current to pass through them are called
▼ Answer
conductors
Question 11.  Current flows from terminal to terminal in an electric current
▼ Answer
positive to negative
Question 12. Path through which an electric current flows is called
▼ Answer
electric circuit
Question 13. The of a bulb glows when current passes through it.
▼ Answer
filament
Question 14.  Materials connected at terminal gets electroplated with desired metals.
▼ Answer
negative
Question 15.  Deflection in shows current is passing.

▼ Answer
magnetic compass
Question 16. A conducting wire carrying current behaves like a
▼ Answer
magnet
Question 17. Flow of negatively charged electrons is called
▼ Answer
electric current
Question 18. When electricity is passed through a liquid, it causes a change.
▼ Answer
chemical