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

▼ Answer

(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.

Question 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.

Question 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

▼ Answer

(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

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Question 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

▼ Answer

(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.

Question 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.

Question 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

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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

▼ Answer

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

Question 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

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Question 21.
During electroplating in $CuSO_4$, (Copper sulphate) solution ……. will get deposit on electrode at negative terminal.
(a) Copper from positive electrode
(b) Sulphur
(c) Copper from $CuSO_4$, solution
(d) None of these

▼ Answer

(c) Copper from $CuSO_4$, solution
During electroplating in $CuSO_4$ (copper sulphate) solution copper from CuSO4 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
(b) Adding some salt in distilled 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
(c) Plastics are used to make handles of electric appliances	(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

▼ Answer

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

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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.

▼ Answer

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 …….. and ……

▼ 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.

▼ Answer

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
