CHEMICAL EFFECTS OF ELECTRIC CURRENT

<1M>

1.Positive terminal of the cell is indicated by:
(A) The shorter line. (B) The longer line. (C) Either of the two lines. (D) None of these.

2.Symbol of a cell in an electric circuit is represented by:
(A) A longer line and a shorter line.
(B) A longer and a shorter vertical parallel line.
(C) A horizontal longer line and a vertical shorter line.
(D) A vertical longer line and a horizontal shorter line.

3.Battery is having:
(A) Two or more cells connected to each other in any manner.
(B) Positive terminal of one cell is connected to the positive terminal of the next cell.
(C) Two or more cells connected in such a way that the positive terminal of one cell is connected to the negative terminal of the next.
(D) Only one cell.

4.Lines connecting the various components represent:

(A) Wires. (B) Terminals of the battery. (C) Battery. (D) Key.

5.Switch can be connected:

(A) To the positive terminal of the battery only. (B) Anywhere in the circuit.
(C) To the negative terminal of the battery only. (D) If required only.

6.When the switch is in the OFF position, the circuit is incomplete. It is said to be:
(A) Open and the current does not flow in the circuit.
(B) Closed and the current flows in the circuit.
(C) Closed and the current does not flow through any part of the circuit.
(D) Closed and the current does not flow through the bulb only.

7.A coil of wire present in electric heater is called:
(A) An element. (B) A compound. (C) A mixture. (D) A solution.

8.In all primary cells chemical energy is changed into …… energy.
(A) Potential. (B) Kinetic. (C) Electrical. (D) None.

9.Appliance, which do not use electric energy:
(A) Geyser. (B) Pressure cooker. (C) Mixie. (D) Immersion rod.

10.The decomposition of an electrolyte when electricity is passed through it is called:
(A) Electroplating. (B) Electrolysis. (C) Conduction. (D) None.

11.The electrical process of coating an inexpensive conductor with a metal is called:
(A) Electroplating. (B) Electrolysis. (C) Conduction. (D) None.

12……..is used in the extraction of metals from their ores.
(A) Electroplating. (B) Electrolysis. (C) Conduction. (D) None.

13.. …… is used for refining certain metals such as copper and zinc.
(A) Electroplating. (B) Electrolysis. (C) Conduction. (D) None.

14.What is electrolysis?

15.Name the vessel consisting of electrodes and electrolyte in which electrolysis takes place.

16.What is current?

17.Name two sources of electric current.

18.What is meant by an electric circuit?

19.What is a battery?

20.Which type of energy is converted into electrical energy in an electric cell?

21.Which effect of electric current is utilized in electroplating?

22.Why is an acid or an ionic salt added to water in the electrolysis of water?

23.Give one term for each:
(i) The electrode through which current enters the electrolyte.
(ii) The electrode connected to the negative terminal of the battery.
(iii) Purifying metals by using electrolysis.

24.When the switch is in the ON position, the circuit from:
(A) The positive terminal of the battery to the negative terminal is complete.
(B) The circuit is said to be closed.
(C) Current flows throughout the circuit instantaneously.
(D) All of these.

25.The thin wire that glows when current passes through a bulb is called:
(A) Tungsten. (B) Filament. (C) Fuse. (D) Terminal.

26.The bulb gets fused when:
(A) The bulb becomes milky. (B) The filament is broken.
(C) The glass has broken. (D) The bulb has become too old.

27.It is unsafe:
(A) To touch a lighted electric bulb. (B) To carry experiments with electric supply from the mains.
(C) To use electric cells for experiments. (D) Both (a) and (b).

28.A wire gets _____ when an electric current passes through it.
(A) Weak. (B) Dull. (C) Hot. (D) Cold.

29.The amount of heat produced in a wire depends on its:
(A) Length only. (B) Thickness only.
(C) Both length and thickness. (D) Material, length and thickness.

30.The filament of an electric bulb glows on passage of current because:
(A) It has got heated to a high temperature. (B) It is very thin.
(C) A chemical reaction takes place in the bulb. (D) All of these.

31.The ISI mark on an electric appliance ensures that:
(A) The appliance is safe. (B) Wastage of energy is minimum.
(C) Both (a) and (b). (D) None of these.

32.Excessive currents in electrical circuits are the consequence of:
(A) Direct touching of wires. (B) Connecting many devices to a single socket.
(C) Faulty wiring. (D) All of these.

33.The needle of a compass:
(A) Is a tiny magnet that rests in North - South direction.
(B) Gets deflected when a magnet is brought close to it.
(C) Gets deflected when current flows in a nearby wire.
(D) All of these.

34.Magnetic effect of the electric current:
(A) Means that a wire behaves like a bar magnet on passage of electricity.
(B) Is utilized to make magnets.
(C) Was first observed by Hans Christian Oersted.
(D) All are correct.

35.Which one is good conductor of electricity:
(A) Wood. (B) Glass. (C) Silver. (D) Plastic.

36.Which one is bad conductor of electricity:
(A) Wood. (B) Copper. (C) Silver. (D) Gold.

37.The process of depositing a layer of any desired metal on another material by means of electricity is called:
(A) Electroscoping. (B) Electroplating. (C) Both. (D) None.

38.Which one is not a source of electric current:
(A) Voltaic cell. (B) Daniel cell. (C) Battery. (D) None.

39.An electrode connected to the negative terminal of a battery is called:
(A) Anode. (B) Cathode. (C) Pole. (D) None.

40.An electrode connected to the positive terminal of a battery is called:
(A) Anode. (B) Cathode. (C) Pole. (D) None.

41.A compound formed by ions is called an ……. Compound.
(A) Metallic. (B) Ionic. (C) Covalent. (D) None.

42.A metal is released in the electrolysis of a salt. At which electrode will it be deposited?
(A) Anode. (B) Cathode. (C) Both. (D) None.

43.What is the full form of 'LED'

44.Does pure water conducts electricity? It not what can we do to make it conducting

45.Name the products formed when electricity passes through distilled water

<2M>
46.What do you understand by the term magnetic effects of an electric current?

47.What do you understand by the term chemical effects of an electric current?

48.What is a conductor? Give two examples.

49.What is an insulator? Give two examples.

50.What do you mean by the term electroplating?

51.Write some applications of the chemical effect of current.

52.What makes LED more useful for testing the flow of current.

53.Why it is dangerous to touch on electrical appliance with a wet hand?

54.A child staying in coastal region tests the drinking water and also the seawater with his tester. He finds that compass needle defects more in the case of sea water. Can you explain the reason?

55.State two applications of electrolysis.

<3M>

56.What is an electrode? What are cathode and anode?

57.What are dangers of electricity?

58.Write some points that should be remember while electroplating.

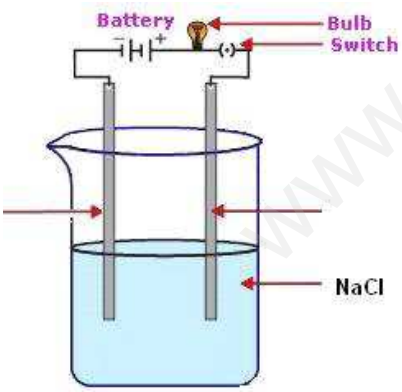
59.Write some uses of electroplating.

60.List three conditions that help to ensure a smooth and firm deposit during electroplating.

<5M>

61.What is electroplating? How are steel spoons plated with silver? Explain with the help of diagram.

62.An experiment was set as shown below:



(i) Label the parts indicated by arrows in diagrams.
(ii) Will the bulb glow if the sodium chloride is in:
(a) Solid state?
(b) Molten state?
(c) Aqueous state?
Explain your answer. .

63.Describe an activity to show that current flowing through solutions produce a magnetic effect