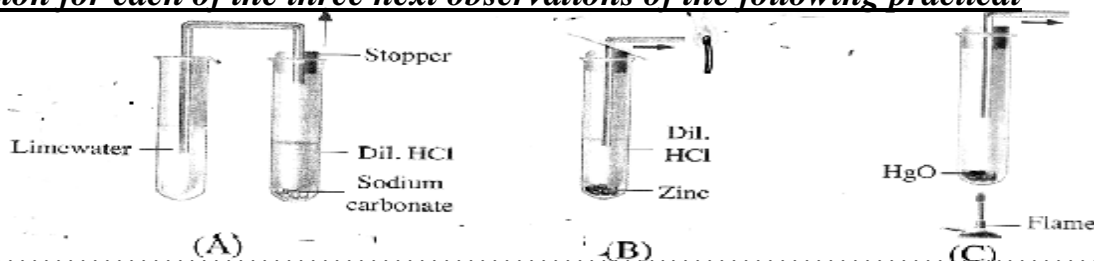


Unit 1 test

1) Write an equation for each of the three next observations of the following practical experiments:



2) Complete the following statements:

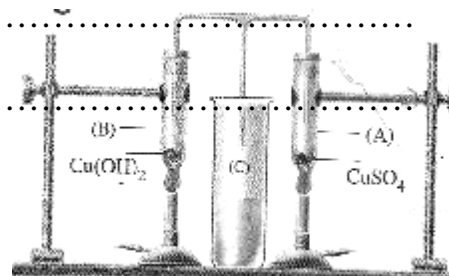
- 1) Thermal decomposition reactions involve the of the compounds by the effect of
- 2) Oxidation and reduction are two processes.
- 3) Chemical activity series is the arrangement of metals in order according to the degree of their
- 4) At the end of the reaction , the concentration of becomes 100% while the concentration of becomes zero.
- 5) Orange and lemon contain acid.

3) Give reasons for:

- 1) Food must be heated during its preparation.
- 2) Aluminum wire burns inside a jar filled with oxygen faster than the burning in atmospheric air.
- 3) Calcium and magnesium minerals are very important specially for children.
- 4) Milk is considered a colloidal mixture.
- 5) Although (Al) comes before (Zn) in chemical activity series but it takes a short period of time to react with hydrochloric acid .

4) From the opposite figure, answer the following:

1. Show by symbolic equations the name of the evolved gas in both tubes (A) & (B)
2. What is the name of the liquid which is formed in tube (C)?



Unit 2 test**1) Write the scientific term:**

1. Atoms which have unstable nuclei. [.....]
2. The measuring unit of absorbed radiation. [.....]
3. The electric state of a conductor that shows the transference of electricity from or to the conductor when it is connected to another one. [.....]
4. The resistance of a conductor that allows the passing of an electric current of 1 ampere through it when the potential difference across its ends is 1 volt. [.....]
5. The electric current of fixed intensity and direction. [.....]

2) Give reasons for:

1. The nuclear energy is used to destroy mankind only is not correct.
.....
2. The rheostat is connected in series in an electric circuit.
.....
3. The voltmeter is connected across the two poles of a battery.
.....
4. Electric current produced from electric generator is used in lighting and operating electric appliances.
.....
5. Some cells are connected in electric circuit in parallel.
.....

3) Problems:

1. The potential difference between the two ends of a conductor is 6 volts and the electric current intensity passing in the conductor is 0.5 ampere what is the electric current intensity passing through the conductor if it is connected with an electric source of electric potential difference = 12 volts.
.....
2. What's the quantity of electricity which passes through a conductor its resistance 1000 ohm for 20 minutes when the potential difference across its ends is 220 volts.
.....
- 3- Calculate the quantity of electricity that flows through a wire if the electric current intensity passing through it is 30 amperes in 5 minutes.
.....
- 4- You have 4 similar electric cells, the electromotive force of each is 1.5 volts, explain by drawing how can you connect them to obtain an e.m.f of;
a. 1.5 volts b. 3 volts c. 6 volts d. 4.5 volts
.....

4) What's meant by:

1. Ohm's law:

.....

2. Nuclear energy:

.....

Second term tests

Science, 3 rd prep.

Unit 3 test

1) Write the scientific term:

1. A chemical message that controls and regulates the activities and functions of most body organs.

2. Change in the nature of the hereditary factors that control the traits of the living organism.

3. They are parts of DNA on the chromosomes and control the hereditary traits of the individual.

4. The branch of science that aims to explain how different characteristics transfer through generation.

5. A kind of hereditary trait that is always pure.

2) Give reasons for:

1) Man needs to make some mutations artificially.

.....

2) Pituitary gland is called the master gland.

.....

3) Mendel removed the stamens of pea plant flower before the maturation of the anther.

.....

4) The ability of rolling the tongue is a dominant trait in the human being .

.....

5) Pancreas is a double function gland.

.....

3)A- Problems:

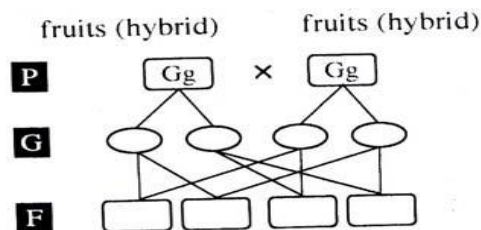
a. Two wide eyes persons crossed then two of their children had wide eyes and other two had narrow eyes, Explain on genetic bases the genetic structure of Parents and the children

.....

.....

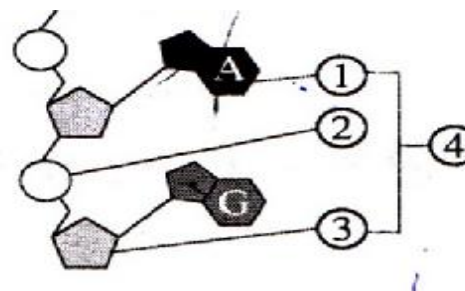
.....

B- Complete the following graph :



C- Look at the following fig then label it:

- 1).....
- 2).....
- 3).....
- 4).....



Second term tests

Science, 3rd prep.

Second term test

1) Write the scientific term for the following statements:

- a- The flow of electric charges in a conductor.
- b- The electric current of fixed intensity and direction.
- c- Parts of the DNA that presents on the chromosomes and carry the hereditary traits of the individual.
- d- Change in the nature of the hereditary factors that control the traits of the living organism, which results in a change in the traits of this living organism.
- e- Mechanism with which hormone works inside the human body.

2)a- Choose the correct word:

- a- Direct current can be produced form.....
(electrochemical cells – electric generators – electric power stations)
- b- is the measuring unit of the electric charges. (coulomb – ampere – volt)
- c- The hormone releases the needed energy from the food stuffs
(growth – estrogen – thyroxin)

b- Calculate the potential difference of the two ends of a vacuum cleaner whose resistance is 22 Ohm and the current intensity passing through it is 10 Ampere.

3) Give reasons for the following:

- a- It is better to use the alternating current rather than the direct current.
.....
- b- The voltmeter is connected to both poles of the battery in the electric circuit.
.....
- c- Pituitary gland is called the master gland.
.....
- d- The rheostat is connected in series in an electric circuit.
.....
- e- A yellowish white color is formed on heating white sodium nitrate.
.....

4) a- If two pea plants one with hybrid red color flower and the other with white flower are crossed, explain on genetic bases the result of his crossing and the ration of the red flowered plant to the with flowered planet.

.....

b- Compare between the following:

- a- The dominant trait and the recessive are one with giving examples.
- b- Heating of metal oxide and metal hydroxide.
- c- Saturated and unsaturated solution.
- d- Oxidation and reduction.